THE MARKLAND LIBRARY

PRESS MARK
Press Letter L
Shelf No. 8
Book No. L8

781.3
BER

Digitized by the Internet Archive
in 2024

https://archive.org/details/longmansmusiccou0000unse

HARMONY AND COUNTERPOINT

WORKS BY T. H. BERTENSHAW, B.A. B.Mus.

Assistant Master in the City of London School.

LONGMANS' MUSIC COURSE.

Part I.—ELEMENTS OF MUSIC. With Exercises. Crown 8vo. 1*s*.

⁂ In this Part *time* is treated very fully, including *accent*, *beating time*, *use of rests*, &c. A special chapter is devoted to transcription from one time to another (*e.g.* from two-four to six-eight), and to the variations in time produced by change of accent (*tempo rubato*). Under *scales*, besides *major*, *minor*, and *chromatic* scales, the subject of *Enharmonics* and *Enharmonic Notation* is carefully explained. *Intervals* are treated at great length. The remaining chapters treat of *Transposition*, *Signs and Abbreviations*, *Grace Notes* and *Musical Terms*. Under this last head a section dealing with terms relating to pianoforte technique is included. To each chapter is added a series of questions, many of which are taken from examination papers.

Part II.—HARMONY AND COUNTERPOINT. With Exercises.

Part III.—RHYTHM, ANALYSIS, AND MUSICAL FORM. [*In preparation.*

LONGMANS' FRENCH GRAMMAR.

GRAMMAR. Part I. Up to and including Regular Verbs, with Vocabularies, &c. 1*s*.

GRAMMAR. Part II. Including Pronouns, Adverbs, Irregular Verbs, Subjunctive Mood, Infinite, and Participles, with Vocabularies, &c. 1*s*.

Parts I. and II. Complete in 1 vol. 2*s*.

KEY and SUPPLEMENT. For the use of Masters only, and only to be had direct from the Publishers. Parts I. & II. each 2*s*. 9½*d*. net, post free; complete, 5*s*. 4*d*. net, post free.

LONGMANS' FRENCH COMPOSITION.

By T. H. Bertenshaw, B.A. B.Mus. and Elphège Janau, Assistant French Master in Christ's Hospital, London; Assistant Examiner in the University of London; and Examiner to the Intermediate Education Board for Ireland. With Vocabulary and Index. Crown 8vo. 3*s*. 6*d*.

KEY. For the use of Masters only, 5*s*. 2*d*. net.

London: LONGMANS, GREEN, & CO.
and New York.

5073

PART II.

HARMONY
AND
COUNTERPOINT

WITH EXERCISES

By T. H. BERTENSHAW, B.A., B.Mus.
ASSISTANT MASTER IN THE CITY OF LONDON SCHOOL

PRESENTATION COPY
FROM THE PUBLISHERS
Published Price

LONDON
LONGMANS, GREEN, AND CO.
AND NEW YORK
1895

All rights reserved

Y17481

L. I. H. E.
THE MARKLAND LIBRARY
Accession No. 84.17434
Class No. 781.3 BER.
Catal.

PREFACE

IN the following pages I have tried to simplify the study of Harmony and Counterpoint for beginners. One great difficulty ies in the large amount of ground to be covered before the tudent is able to begin practical work. I have avoided this by breaking up the earlier parts of the subject into convenient ections. Thus, the rules for Part-writing are given as occasion for their use occurs in the exercises, and they are not presented n a body until the pupil has had some experience.

Every teacher knows that the beginner's greatest difficulty ies in writing *successions* of chords. To overcome this I have confined the earlier exercises to chords which have one or more notes in common. Then, by degrees, chords without this connecting link are introduced. By this time the student has ome idea of chordal succession, and he is ready to begin the ystematic study of common chords.

The book embraces the complete system of Harmony as aught in modern text-books, but in apportioning the space I have had in mind more especially the needs of elementary tudents. Thus, common chords and their inversions, the chords f minor keys, the dominant seventh, &c., are treated with nusual fulness. No fewer than fourteen pages are given to suspensions, my experience being that that chapter is often the *pons asinorum* of Harmony.

Great pains have been taken to render the exercises interesting. They are all capable of being worked with a good melody, and they are all constructed on clear rhythmical lines.

I have added a chapter on Harmonising Melodies. This of necessity is short, but it points out a method which the intelligent student will have little difficulty in following. For convenience this chapter is placed nearly at the end of the book, *but the student is urged to take it in sections, as explained at the end of the several chapters on Harmony* (*vide* pp. 119, 129, 137, &c.).

The chapters on Counterpoint are of course very elementary, but it is hoped that they will be found useful.

CONTENTS

HARMONY.

CHAPTER PAGE

Introductory Chapter—Intervals 93
XXIII. Melody and Harmony 100
XXIV. Common Chords in Succession 105
XXV. Common Chords in Succession—*continued* . . . 113
XXVI. Common Chords in Major Keys 117
XXVII. First Inversions in Major Keys 119
XXVIII. Second Inversions in Major Keys 124
XXIX. Common Chords in Minor Keys 130
XXX. Inversions of Triads in Minor Keys 134
XXXI. The Dominant Seventh in Major Keys 138
XXXII. Inversions of the Dominant Seventh in Major Keys . 144
XXXIII. The Dominant Seventh in Minor Keys . . . 148
XXXIV. Secondary or Non-Dominant Sevenths 151
XXXV. Recapitulation of the Laws of Part-writing . . 156
XXXVI. Cadences 162
XXXVII. Sequences 166
XXXVIII. Modulation 169
XXXIX. Suspensions 175
Sect. I. The Suspended Ninth 176
Sect. II. The Suspended Fourth 181
Sect. III. Other Suspensions 185
XL. Passing Notes, Auxiliary Notes, Anticipations, Retardations 189
XLI. Chords of the Ninth 198
Sect. I. The Dominant Ninth 198
Sect. II. Inversions of the Dominant Ninth . . 201
Sect. III. The Diminished Seventh, Enharmonic Modulation 204
Sect. IV. Secondary Ninths 209

CHAPTER PAGE
XLII. The Dominant Eleventh 211
XLIII. The Dominant Thirteenth 214
XLIV. Chromatic Concords 219
XLV. Chromatic Fundamental Discords 222
Sect. I. Supertonic and Tonic Sevenths . . 222
Sect. II. Supertonic and Tonic Ninths . . . 225
Sect. III. Chromatic Elevenths and Thirteenths . 228
Sect. IV. Fundamental Discords and the Chromatic Scale 230
XLVI. The Augmented Sixth 233
XLVII. The Dissonant Triads 238
XLVIII. Pedal Notes, Arpeggios, Ground Bass 240
XLIX. Modulation—*continued* 245
L. How to Harmonise a Melody 248

COUNTERPOINT.

LI. Introductory 261
LII. Laws of Progression 263
LIII. First Species of Counterpoint 267
LIV. Second Species of Counterpoint 271
LV. Third Species of Counterpoint 275
LVI. Fourth Species of Counterpoint 278
LVII. Fifth Species of Counterpoint 281
LVIII. Combined Counterpoint 283
Canti Fermi for Exercises in Counterpoint . . 287
Index 289

MUSIC COURSE

PART II.

HARMONY AND COUNTERPOINT

HARMONY.

INTRODUCTORY CHAPTER.

The student who begins the study of *Harmony* should be conversant with what is usually termed the Elements of Music. We shall, therefore, assume that the reader is familiar with the shape and value of notes and rests, time, keys, scales, &c. Certain other elementary subjects which form the immediate groundwork of Harmony it will be convenient to recapitulate.

250. Each note of every diatonic scale receives a technical name.

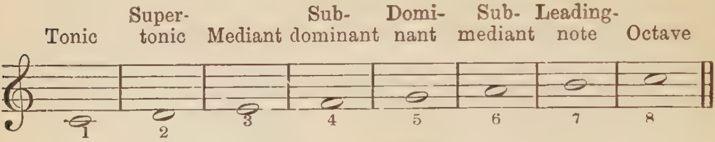
The *first* note is called the **Tonic**; the *eighth* note is called the **Octave.** The *fifth* note, from its importance in harmony, is called the **Dominant** (or *ruling*-note). The *third* note, being *midway* between *tonic* and *dominant*, is called the **Mediant.**

Reckoning from the tonic a fifth *downwards*, we get to the octave of the *fourth* note of the scale, and as the fifth *upward* is called the *dominant* the *fourth note* is called the **Subdominant** (or *lower* dominant). The *sixth* note is midway between *subdominant* and *tonic* (or octave of tonic), and it is called the **Submediant.**

The *second* note is called the **Supertonic** (*i.e. over* the tonic), and the *seventh* note is called the **Leading-note,** because it has a strong tendency to proceed or **lead** up to the octave.

Thus in the key of C these names would be:

FIG. 112.

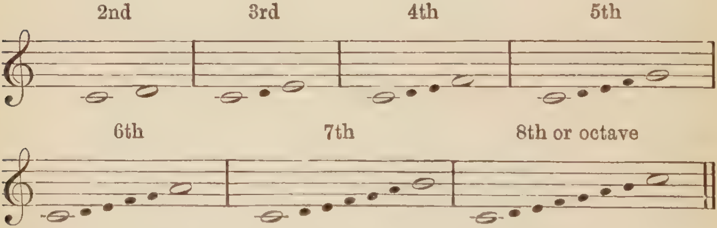


INTERVALS.[1]

251. An **Interval** is the difference in pitch between any two notes. Intervals are named according to the number of degrees of the staff included.

Thus C to D is called a *second*; C to E a *third*, &c., as seen from the following table:

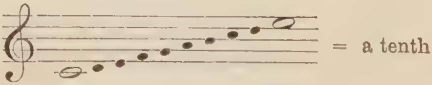
FIG. 113.



Intervals are always counted *upwards* unless the contrary is expressly stated.

252. Intervals up to and including the eighth are called *Simple Intervals*. Beyond the eighth they are called *Compound Intervals*, being merely an octave added to a simple interval, *e.g.* a tenth is an octave added to a third.

FIG. 114.

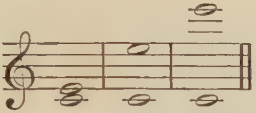


---

[1] For fuller details see Pt. I., pp. 61–72.

With the exception of the ninth, eleventh, and thirteenth, compound intervals are not used in harmony, and the simple name is usually applied however many octaves may be added to a simple interval—*e.g.* each of the following would be called a third in harmony :—

Fig. 115.



253. The smallest[1] interval used in music is the semitone. Semitones are of two kinds. A semitone occurring between two notes with different letter-names is called a **diatonic semitone**—*e.g.* B to C, C to D♭, &c.

A semitone occurring between any note and the same note raised or lowered by an accidental is called a **chromatic semitone**—*e.g.* C to C♯, A to A♭.

254. The **name** of the interval depends entirely on the **number of degrees included.** C to D and C to D♭ are both *seconds*. It is clear then that different *kinds* of intervals must be distinguished.

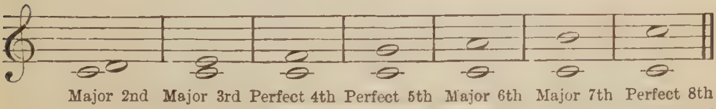
255. Intervals which occur between any two notes of an *unaltered* diatonic scale are called **diatonic intervals.**

Intervals which can only occur in a chromatic scale, or in the Harmonic form of a minor scale, are called **chromatic intervals.**

Diatonic Intervals.

256. Reckoning upwards from the **tonic** of any **major scale**, the *second*, *third*, *sixth*, and *seventh* are called **major**, the *fourth*, *fifth*, and *octave* are called **perfect.**

Fig. 116.



---

[1] See, however, Pt. I., §§ 163–5.

257. We see from fig. 116 that C to D is a *major second*, and it contains *two* semitones (C to C♯, = 1, to D = 2). Some of the *seconds* in this scale are smaller than C to D; thus E to F has only *one* semitone. This is called a **minor second**, and it contains *one* semitone.

258. In the same way there are **minor thirds** (E to G), **minor sixths** (E to C), **minor sevenths** (D to C); each *minor* interval being *one semitone less* than the corresponding *major* interval.

259. All the *fourths* found in the major scale are **perfect** (C–F, D–G, &c.), with the exception of that from the *subdominant* upwards to the *leading-note*, *i.e.* F–B. This is one semitone larger than a perfect fourth, and is called an **augmented fourth.**[1]

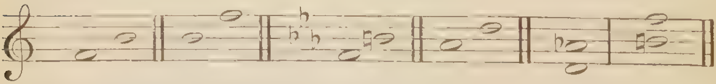
As the augmented fourth consists of six semitones or *three tones*, it is often called the **tritone fourth** or the **tritone**.

260. All the *fifths* found in the major scale are **perfect** (C–G, D–A), except that from the *leading-note* upwards to the *subdominant*. This is one semitone less than a perfect fifth, and it is called a **diminished fifth.**[1]

The *augmented* fourth and the *diminished* fifth occur only once in each major scale, viz. on the fourth and seventh degrees respectively (*a*). In minor scales (Harmonic form) the *augmented* fourth occurs on the fourth and sixth degrees; the *diminished* fifth on the second and seventh (*b*).

FIG. 117.

(*a*) **C major** (*b*) **C minor**



261. Summary of diatonic intervals:

Seconds, thirds, sixths, and sevenths are either **major** or **minor.**
Fourths are either **perfect** or **augmented.**
Fifths are either **perfect** or **diminished.**

---

[1] This fourth is sometimes called the *pluperfect* fourth, and its companion the diminished fifth is then called the *imperfect* fifth. Those who use these names do so because these intervals are diatonic, and they prefer to reserve the names *augmented* and *diminished* for *chromatic intervals*, v. § 262.

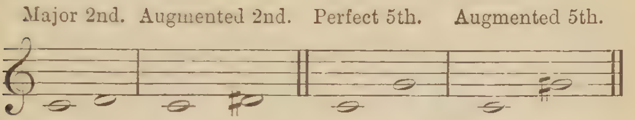
CHROMATIC INTERVALS.

262. **Chromatic** intervals are obtained by chromatically[1] raising or lowering one of the notes of a diatonic interval.

Intervals so altered are called either *augmented* or *diminished*.

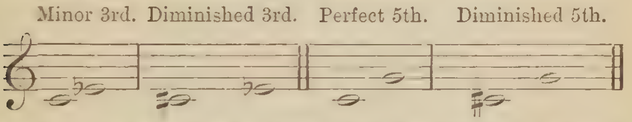
263. When a *major* or a *perfect interval* is increased it is called an **augmented interval.**

FIG. 118.



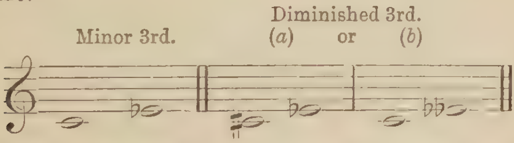
264. When a *minor* or a *perfect interval* is lessened it is called a **diminished interval.**

FIG. 119.



It should be noted that an interval may be *augmented* by raising the upper note or by lowering the lower; similarly, an interval may be *diminished* by raising the lower note or by lowering the upper, *e.g.*:

FIG. 120.



265. All *augmented* and *diminished* intervals are *chromatic* **except the augmented fourth[2] and the diminished fifth,**[2] which **can occur in diatonic scales.**

---

[1] *I.e.* by using an accidental, *v.* § 253.

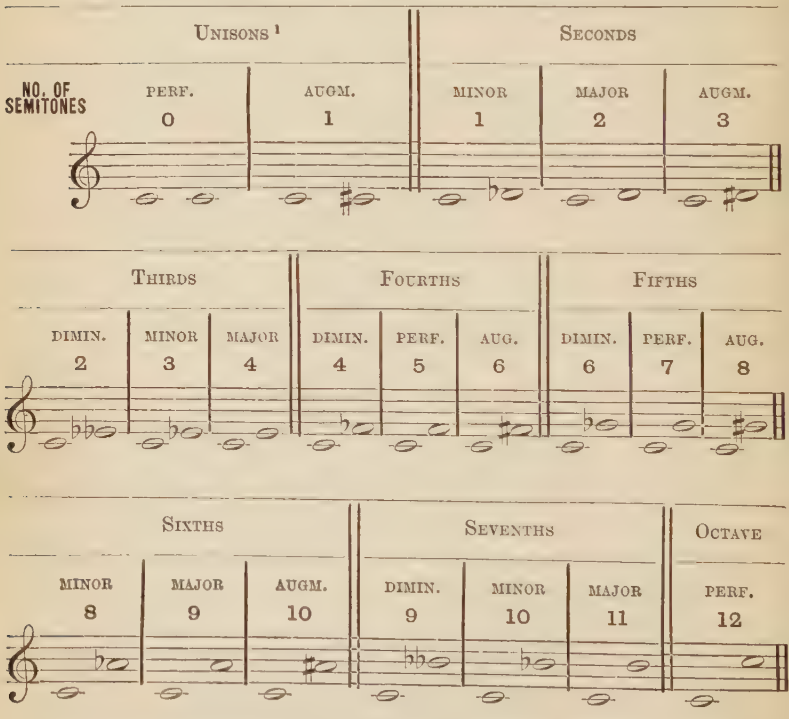
[2] The augmented fourth and diminished fifth may be either diatonic or chromatic according to the key in which they occur. Thus if, in the key of C, F is made sharp by an accidental and there is no modulation, C to F♯ would be in the chromatic scale of C, and therefore a chromatic interval. But if the same interval occurs in G it is clearly diatonic, because, in the key of G, F♯ is part of the diatonic scale (*v.* § 593).

266. Theoretically all intervals may become *diminished* or *augmented*, but only the following are used in harmony:

Intervals which can be **augmented**: seconds and sixths.
Intervals which can be **diminished**: thirds and sevenths.
Intervals which can be both **augmented** and **diminished**: fourths and fifths.

We now give a complete table of all intervals, showing the number of semitones in each.

267. Table of **Diatonic** and **Chromatic** intervals:



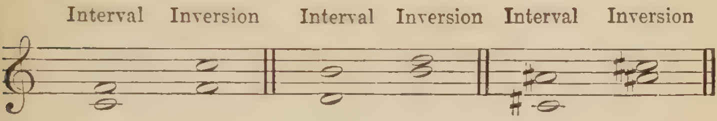
---

[1] The **unison**—*i.e.* two notes of the same name—is not, strictly speaking, an interval, but it is usually included in a scheme of intervals.

INVERSION OF INTERVALS.

268. When the lower note of an interval is placed above the upper, or *vice versâ*, the interval is said to be **inverted.**

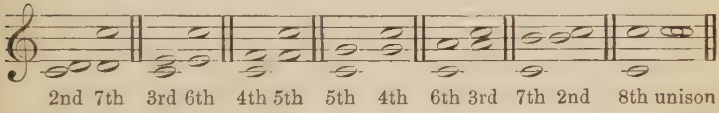
FIG. 121.



269. The numerical name of an interval subtracted from the number *nine* always gives the numerical name of the *inversion*—*e.g.* a third becomes a sixth (9 – 3); a fourth becomes a fifth.

The interval and its inversion together make up *an octave*—*i.e.* eight degrees; but one note of the interval is counted twice—*e.g.* C to *D* and *D* to C; therefore the total number is nine.

FIG. 122.



270. Most intervals when inverted change their quality.

{ **Major** inverted becomes **minor.**
{ **Minor** ,, ,, **major.**

{ **Augmented** inverted becomes **diminished.**
{ **Diminished** ,, ,, **augmented.**

But **Perfect** inverted **remains perfect.**

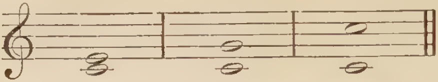
Thus, a major second becomes a minor seventh, &c.

271. **Consonance** and **dissonance.**

A **consonant interval** is a combination of two notes which sounds complete and satisfactory in itself.

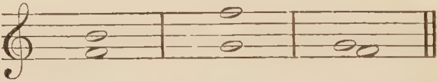
If we play the following intervals on the piano we notice the completeness.

FIG. 123.



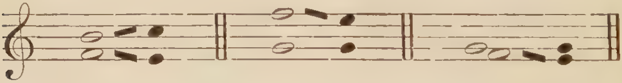
A **dissonant interval** is one which sounds incomplete and unfinished; it requires other notes to follow it to make a satisfactory effect.

FIG. 124.



If we play these intervals the incompleteness is evident. They require to be followed by other notes to complete them, as shown in fig. 125; this is called **resolving** the dissonances.

FIG. 125.



272. The *consonant* intervals are **perfect unison** and **octave, perfect fifth, perfect fourth; major** and **minor thirds, major** and **minor sixths.**

Major or *minor seconds*, or *sevenths*, and all *augmented* and *diminished* intervals, are **dissonant.**

The *consonant intervals* are subdivided into *perfect consonances* (unison, octave, perfect fourth and fifth), and *imperfect consonances* (major and minor thirds and sixths).

CHAPTER XXIII.

273. **Melody** means sounds of different pitch heard *in succession.*

Harmony means sounds of different pitch heard *in combination.*

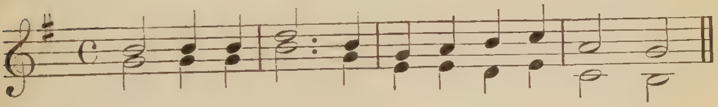
When each combination consists of *two* notes the music is said to be in *two parts*, fig. 126 (*a*).

When each combination consists of *three* notes the music is in *three parts* (*b*).

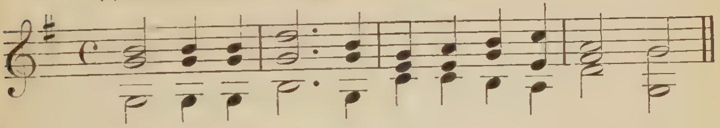
When each combination consists of *four* notes the music is in *four parts* (*c*).

FIG. 126.

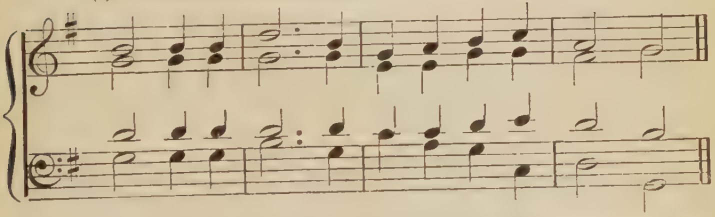
(*a*) Harmony in *two* parts.



(*b*) Harmony in *three* parts.



(*c*) Harmony in *four* parts.



274. A **part** means what is performed by one voice or one instrument.

Thus, in fig. 126 (*a*) the treble voice would sing the upper notes: these are called the *treble part*. Similarly, the lower notes are called the *alto part*, &c.

275. Three or more notes sounded together are called a **Chord.**[1]

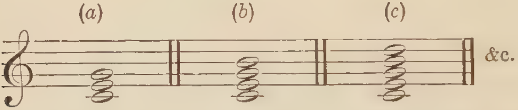
---

[1] Though a chord is built up of at least *three* notes, one of these notes is sometimes omitted in using the chord.

In *Harmony* we study the way in which chords are built up, and the relation of chords one to another—*i.e.* the way in which one chord may follow another.

276. **Chords are built up** by adding successive thirds above a given note. The note from which the chord is built up is called the **root** of the chord.

FIG. 127.



At (*a*) the note C is the **root.** Above C is added a *third* (E), and then another *third* (G). At (*b*) we have three *thirds* added above the *root* C; at (*c*) we have four *thirds* added.

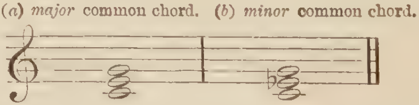
277. **Triads.** When a *chord* consists of two thirds placed one above the other, it is called a **triad,** because it consists of *three* notes. Fig. 127 (*a*).

278. **Common Chords.**[1] When the interval from the root to the upper note of a triad[2] is a *perfect fifth*, the chord is called a **Common Chord.**

A **common chord**, then, consists of any note with the **third** and **perfect fifth** above it.

If the *third* is *major* the chord is a **major common chord.**
If the *third* is *minor* the chord is a **minor common chord.**

FIG. 128.



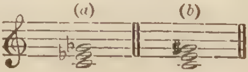
(*a*) is a *major* common chord because C–E is a *major* third.
(*b*) is a *minor* common chord because C–E♭ is a *minor* third.

---

[1] Some writers only apply the term *common chord* to a chord in four parts (§ 280).

[2] When the fifth of a triad is diminished and the third is minor, the chord is called a **diminished triad** (*a*) (§ 640). When the fifth is augmented and the third is major, the chord is an **augmented triad** (*b*) (§ 642).

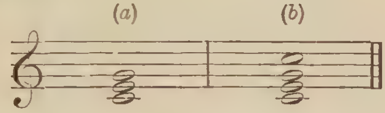
FIG. 129.



279. Music is written in two, three, four, five, or more *parts*; but the most convenient method of studying Harmony for beginners is to practise Harmony in *four* parts.

280. Since a *common chord* consists of three notes, it is evident that if common chords are used in four-part harmony, one of the notes of each chord must be used twice. This is called **doubling** [1] a note.

Fig. 130.



(*a*) The common chord on C.
(*b*) The same common chord with the *root* (C) *doubled.*

281. **Rules for Doubling.** (*a*) The **Root** of a chord is the best note to double, and the next best is the **fifth.**

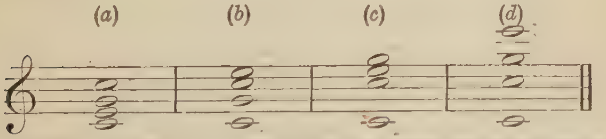
(*b*) When the *third* of a chord is *minor* it may be doubled. When the *third* is *major* it should not, as a rule, be doubled, though sometimes, as will be seen later, this cannot be avoided.

(*c*) *Never* double the **leading-note.**

282. Sometimes it is necessary to omit a note of a common chord. The *third should never be omitted*, for without the third it is impossible to say whether the chord is major or minor. The *fifth* is the best note to omit.

283. In fig. 131 (*a*) the common chord on C is given with the doubled root in the upper part. The same chord may be written with either the *third* or *fifth* in the upper part. **If the root of the chord is kept in the Bass**, the position of the other notes may be varied without altering the nature of the chord.

Fig. 131.



---

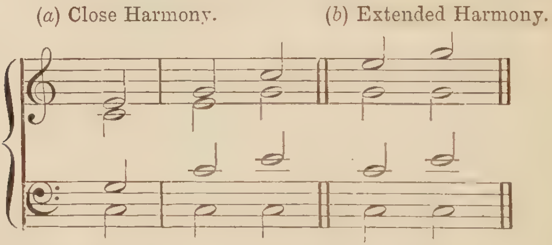
[1] The note *doubled* may be the same note in unison or one or more octaves higher.

Each of these chords is the same; each consists of the bass note **C**, with E, G, and the doubled C. In (*b*) the third (E) is put an octave higher than at (*a*), but because the chord (*b*) has the same bass note unchanged the chord is the same.

284. When the three upper notes of a chord in four-part harmony lie close together, the chord is said to be in *close* harmony or in a **close position** (*a*).

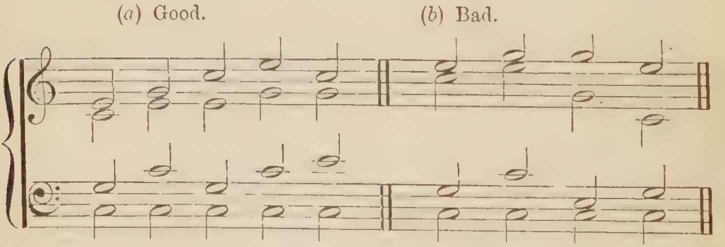
When the parts are further apart from each other, the chord is said to be in extended harmony, or in an **extended position** (*b*).

FIG. 132.



285. The best position of a chord is when the parts are about equally distant from each other. If this is not possible, then the widest interval should be, as far as possible, between the lower parts.

FIG. 133.



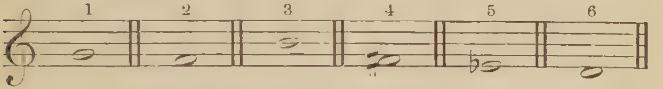
(*a*) The position of each of the chords here is good; the notes are about equally distant, and in almost every case the largest interval is between the two lower parts.

(*b*) Each of the chords here is in a bad position; the notes are unequally distributed, and the widest interval is *not* between the lowest notes.

Exercises.

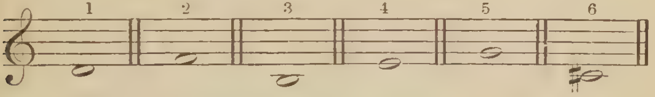
1. Write a common chord (of three notes) on each note of the scale of C major (except the leading-note), and state which chords are major and which minor.

2. Write a major common chord in four parts on each of the following bass notes, doubling the root in each case.

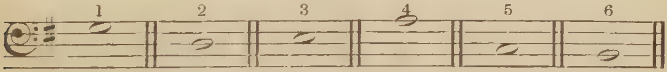


[Each chord is distinct from its neighbours; use accidentals where necessary.]

3. Write, as in Question 2, a minor common chord, doubling the third.



4. Write on two staves common chords (in four parts) on the following notes (according to the key), double either *root*, *fifth*, or the *third* (when it is minor).



CHAPTER XXIV.

COMMON CHORDS IN SUCCESSION.

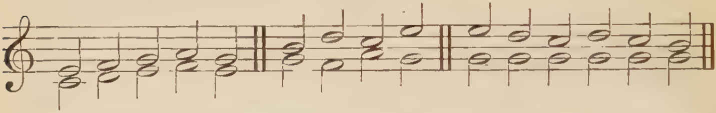
286. There are three ways in which the notes of chords may move:—

(*a*) When two parts are both moving in the same direction, they are said to be in **similar motion.**

(*b*) When two parts are moving in opposite directions, they are in **contrary motion.**

(*c*) When one part remains stationary—*i.e.* on the same note—while the other moves up or down, we have **oblique motion.**

FIG. 134.



287. In using successions of chords it is best to vary as much as possible the kind of movement. Thus, after two parts have moved in similar motion, it is best to let them then move in contrary or oblique motion.

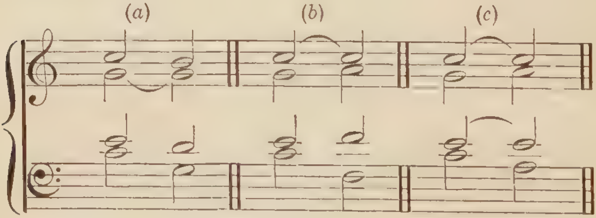
We must now consider how common chords can follow each other.

288. One chord most easily follows another when the two chords contain one or more *notes in common.*

For example, the common chord on C (*i.e.* C, E, G) can easily be followed by the common chord on G (*i.e.* G, B, D), because each chord contains the note G. Similarly, the common chords on C (*i.e.* C, E, G) and F (*i.e.* F, A, C) each contain C.

289. When two chords following each other have a note in common, it is best[1] as a rule to keep that note *in the same part or voice.*

FIG. 135.



(*a*) The chord on C (with root doubled) followed by chord on G (with root doubled), the note G is kept in the alto.

(*b*) The note C kept in the treble.

(*c*) Here the two chords have *two* notes in common. Both C's are kept in the treble; both E's are kept in the tenor.

---

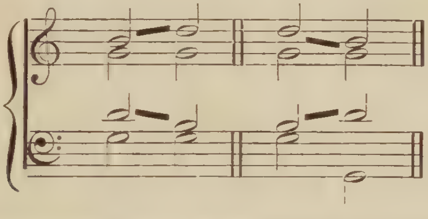
[1] When a rule states that such and such a course is 'best,' it implies that it is not absolutely imperative, but that sometimes, owing to circumstances, it may be necessary to disregard it.

290. The notes of a chord in moving to the notes of the next chord should do so with **as little leaping as possible.** When possible they should move to the note next above or below.

At (*a*) fig. 135, C moves *one* step to B; E moves *one* step to D.

291. When the bass-note of a common chord (or its octave) is repeated monotony is avoided by letting two of the parts alternately take the third and fifth of the chord, the two parts moving in contrary motion.

FIG. 136.

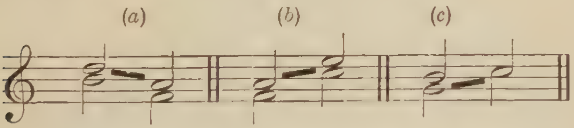


In writing harmony certain rules[1] must be followed.

292. The parts must not cross or overlap.

Each part must be kept distinct from the others, *e.g.* the treble must not go to a lower note than the alto of the previous chord, and *vice versâ.*

FIG. 137.



At (*a*) the treble D goes to A, which is lower than the alto B of the previous chord.

At (*b*) the alto goes to C which is higher than the previous treble A.

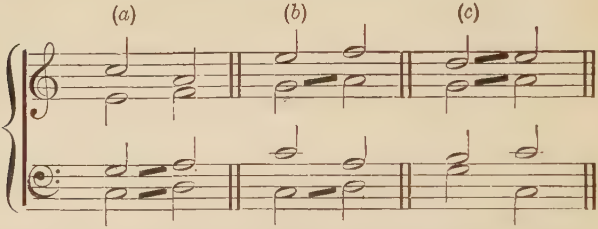
---

[1] These rules are given by degrees as the necessity for them arises in the exercises. In Chapter xxxv. the complete list will be found. The student is urged to keep to all the rules here given. There is scarcely a rule of Harmony which is not broken some time or other by the greatest writers, but the beginner should recognise that they only can be trusted to break rules who know thoroughly how to keep them.

293. **No two parts** may move at the distance of a **perfect fifth** in two consecutive chords.

This fault is called **consecutive fifths.**

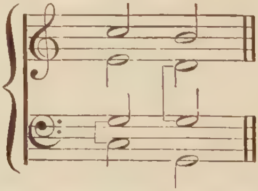
FIG. 138.



At (*a*) the bass and tenor of each chord make a *perfect fifth.*
At (*b*) the bass and alto of each chord make a *perfect fifth.*
At (*c*) the treble and alto of each chord make a *perfect fifth.*

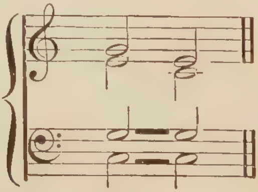
294. It must be clearly understood that *perfect fifths* are only disallowed when they occur between the same parts. Thus in fig. 139 there are *perfect fifths* between the bass and tenor of the first chord, and between the tenor and alto of the second, but this is perfectly correct because the fifths are *not between the same parts.*

FIG. 139.



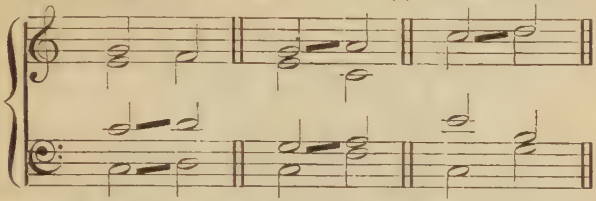
295. Nor again are there *consecutive fifths* when two parts are merely repeated. *Consecutive fifths* are only objectionable between parts which are both moving.

FIG. 140.



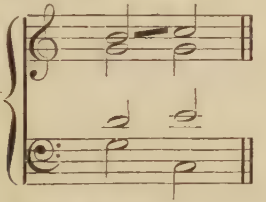
296. No two parts may move at the distance of a **perfect octave** or **unison** in two consecutive chords, a fault called **consecutive octaves.**

FIG. 141. (*a*) Consec. Octaves. (*b*) Consec. Unisons.



297. Every exercise will conclude with the common chord on the *tonic*, and most frequently the chord immediately before it is the common chord on the *dominant*. This ending with the *tonic common chord* preceded by the *dominant common chord* is called a **perfect cadence** [1] (*v*. ch. xxxvi).

FIG. 142. Perfect Cadence.



298. The third of the dominant common chord is always the *leading-note*. The leading-note (called by the French the *sensitive* note) must be very carefully handled, and we now give the rules for its treatment:

(*a*) The **leading-note** must **never** be doubled.

(*b*) When the **leading-note** occurs in a **perfect cadence** it must **always rise** to the **tonic.**

(*c*) When the leading-note is *not* in a perfect cadence it is *better* for it to rise; but it may rise to any note, not necessarily to the tonic (*v*. § 433).

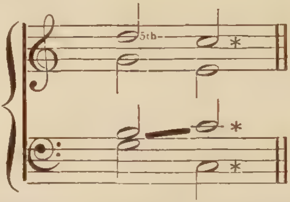
---

[1] The word *cadence* means *falling*. The music, we might say, *falls* to a close.

299. Note on perfect cadence.

When, as in fig. 143, the *treble* in a perfect cadence has the *fifth* of the dominant chord going to the *tonic* of the final chord, this final chord will consist of the root used three times and the third, the fifth being omitted. For the bass goes to the *root*, the treble goes to the *root*, and the leading note (§ 298) goes to the *root*. As the third of a chord cannot be omitted, we must omit the fifth (§ 282).

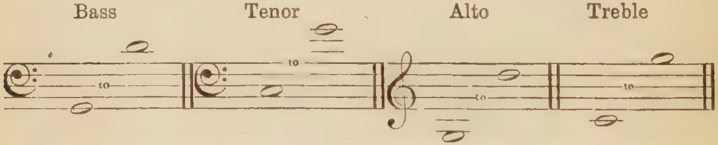
FIG. 143.



300. In writing exercises in four parts it is best to consider the parts as *treble*, *alto*, *tenor*, and *bass* voices respectively. The upper part (treble) should therefore never exceed the usual compass of the treble voice, and so for each of the others.

The compass of each voice is shown below:—

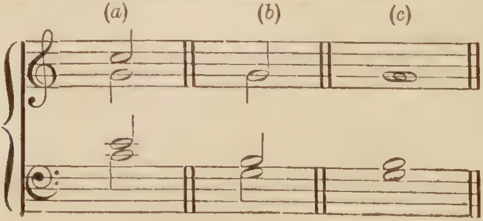
FIG. 144.



301. The early exercises should be written on two staves bracketed together as in fig. 145. The treble and alto stand on the upper stave, the bass and tenor on the lower. To distinguish between the two parts on the same stave, the upper part of each stave has the stems turned upwards, the lower, downwards (*a*). If two parts on the same stave have the same note, one head is written, and two stems, one upwards and one downwards (*b*). If the note is one without a stem the two notes are written overlapping as at (*c*).

In writing notes with stems place stems which turn upwards to the *right* of the head; those which turn downwards to the *left*.

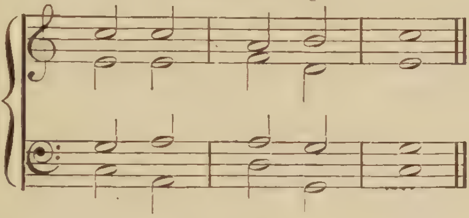
FIG. 145.



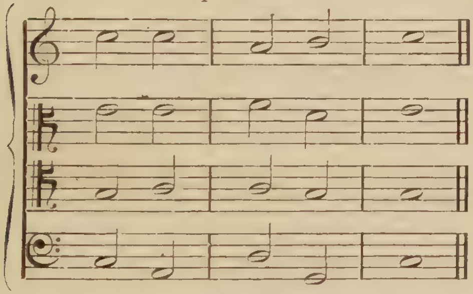
302. The method of writing four parts on two staves is called **short score** or *pianoforte score.* Sometimes each part is written on a separate stave, when the *music* is said to be in **open score** or simply **in score.** When exercises in Harmony are written in *open score* it is customary to use the alto and tenor clefs for those voices (Part I. § 16). The student who intends to carry his musical studies into the highest branches should familiarise himself as early as possible with this method of writing, although perhaps in the first beginnings it is well to master the elementary facts of harmony unhampered by the addition of unfamiliar clefs.

Short Score.

FIG. 146.



Open Score.



303. When an exercise is written it should be examined carefully to see if it is free from error, thus:

(*a*) Examine the *leading-note* each time it occurs to see if it proceeds properly.

(*b*) See if there are any *consecutive fifths* or *octaves.* In doing this it is best, at first, to examine separately each pair of parts, viz. treble and alto; treble and tenor; treble and bass; then alto and tenor; alto and bass; and, finally, tenor and bass.

(*c*) See if any note is incorrectly doubled.

When the exercise appears to be satisfactory, play it over on the pianoforte to test what you have written.

304. *** It is very important that the student should be able *to hear mentally* what he is writing. With most people this is a very slowly acquired power, but the student should not rest until by constant practice he is able *mentally to hear* the sound of the chords and successions of chords he is writing.

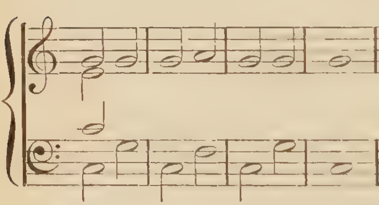
EXERCISES.

1. Write on two staves common chords in four parts and in various positions, on the *tonic*, *dominant*, *subdominant*, *supertonic* and *submediant* of the scale of C major [each chord to be independent of its neighbours]. Do the same in G major and in F major.

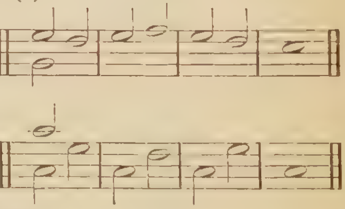
2. Add two inner parts to each of the following, using only common chords.

Remember §§ 289–96 and 298.

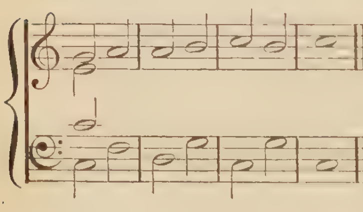
(1)



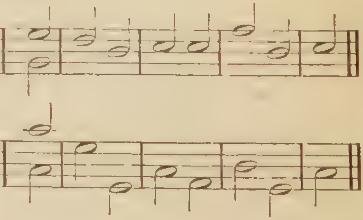
(2)



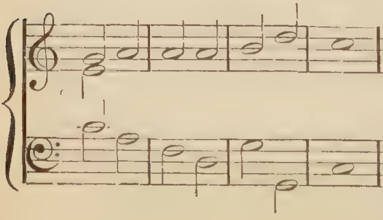
(3)



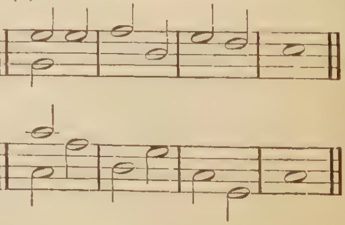
(4)



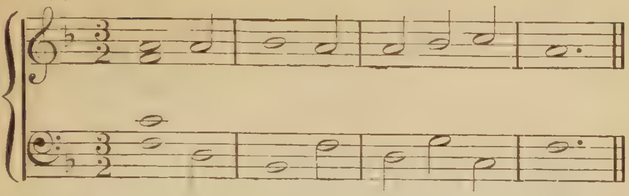
(5)



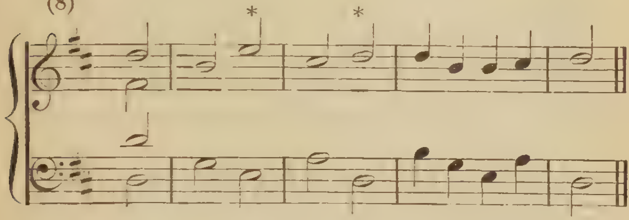
(§ 299) (6)



(7)



(8)



* Omit the 5th.

3. What is a *perfect cadence*? Write a perfect cadence in four parts in each of the following major keys, using proper key-signature: E♭, A, G, A♭, E, and B♭.

CHAPTER XXV.

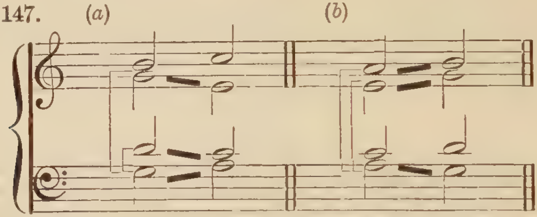
COMMON CHORDS IN SUCCESSION—*continued.*

305. When two successive chords have no note in common there is greater danger of *consecutive fifths* and *octaves.* To avoid this, let the two parts which in the first chord form a perfect fifth or perfect octave proceed by **contrary motion,** whenever possible.

We shall see this best by examining some examples.

306. I. At (*a*) fig. 147 the common chord on the *dominant* is followed by the common chord on the *submediant*. At (*b*) the common chord on the *submediant* is followed by the common chord on the dominant. In neither case have the successive chords notes in common.

FIG. 147.



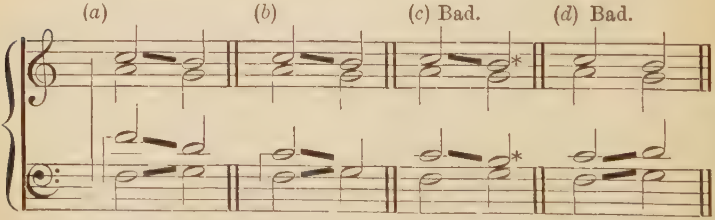
(*a*) In the first chord *bass and tenor* (G, D) form a *perfect fifth*; they proceed by contrary motion.

Similarly *bass* and *alto* (G, G) form a *perfect octave* and proceed by contrary motion.

(*b*) *Bass* and *alto* form a *perfect fifth*; *bass* and *treble* are a *perfect octave*. Both move by contrary motion.

307. II. The *dominant* common chord is rarely followed by that on the *subdominant*, but the succession *subdominant*, *dominant* is very common.

FIG. 148.



(*a*) Common chord on *subdominant* followed by common chord on *dominant*; the parts of the first chord forming *perfect fifth* and *octave* move **in contrary motion.**

(*b*) The same succession of chords, but now the first chord has the *fifth* doubled.

308. **N.B.**—Notice that when, as at (*b*), the subdominant common chord with doubled fifth is followed by the dominant common chord, the *latter has the root three times and no fifth*. For the *tenor* (C) cannot go to B, as that would be doubling the leading-note and would give consecutive octaves with the treble, as at (*c*), § 298 (*a*), and to take it to D would produce *consecutive fifths* (*d*).

309. We have already seen that chords should move to and from each other with as little *leaping* as possible. Each *part* or *voice* should be considered as a *melody*, and should follow the rules which regulate the construction of melody.

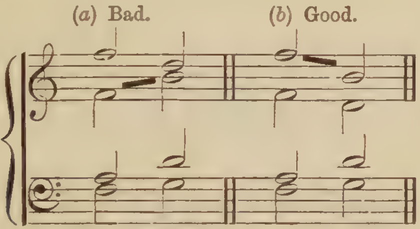
The chief points to be here remarked are:

310. I. No part should move by an **augmented interval.**[1]

For example, in proceeding from the common chord on the *subdominant* to that on the *dominant*, it would be bad to write as at (*a*) fig. 149, because the alto (F) moves upwards to B from the fourth to the seventh degree of a major scale, which is an *augmented* interval.

This would be corrected by writing as at (*b*) where the interval F to B *downwards* is a *diminished interval.*

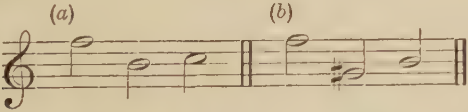
Fig. 149.



311. II. If any part moves by a *diminished* interval the part should return at once to some note within that diminished interval.

The reason for this is that every *diminished* interval is dissonant and requires resolving (§ 271).

Fig. 150.



(*a*) F to B *downwards* is a diminished fifth proceeding to C, which lies between F and B.

(*b*) F to G♯ *downwards* is a diminished seventh proceeding to B.

---

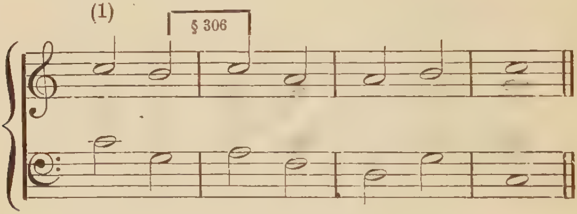
[1] Some exceptions to this rule will be explained later (§ 430).

EXERCISES.

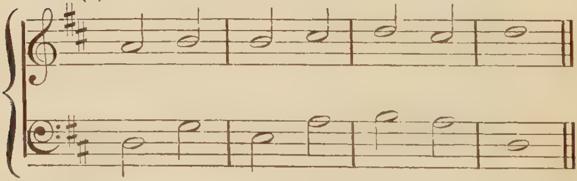
In the following exercises *carefully avoid* **consecutive fifths** and **doubled leading-note.**

Add two inner parts to the following, using only common chords. Remember § 288.

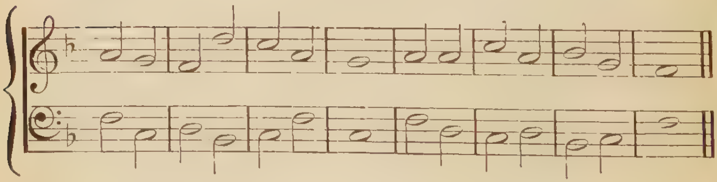
(1)



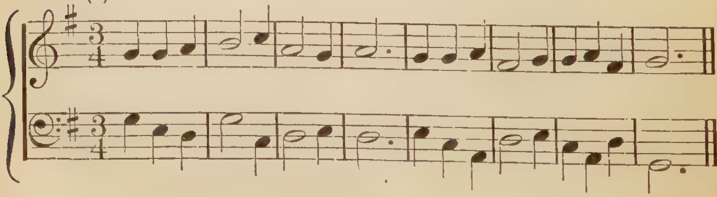
(2)



(3)



(4)



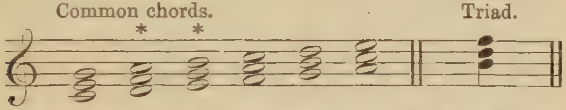
CHAPTER XXVI.

COMMON CHORDS IN MAJOR KEYS.

312. A **common chord** may be written upon every note of a major scale except the leading-note.

The chord on the leading-note has a diminished fifth and is called a *diminished triad* (p. 102, n. 2).

FIG. 151.



Of these common chords three are *major*, and three *minor* (marked *).

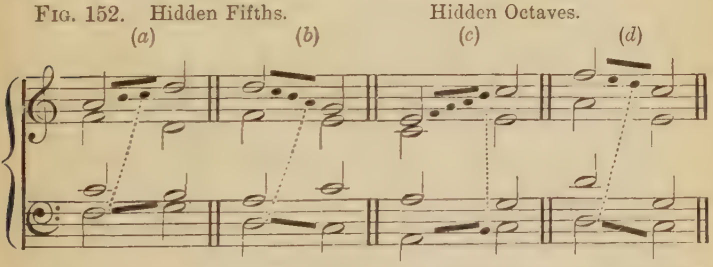
The common chord on the *mediant* is not much used (v. also § 643).

So far we have only required the student to add two inner parts. We shall now give exercises in which the melody has to be supplied as well as the inner parts. Before doing this we must explain some additional laws of progression which refer specially to the outer parts.

313. The two *outer* parts (*i.e.* the *treble* and *bass* in four-part harmony) are called the **extreme parts.** The middle parts (*i.e. alto* and *tenor*) are called the **inner parts.**

314. **Hidden consecutives.** The *extreme parts* may **not** proceed by *similar* motion to a **perfect fifth, perfect octave,** or **unison.**

FIG. 152.



At (*a*) the treble goes to D, the bass to G by *similar motion.* The effect of this is almost as bad as if we filled in the small notes, thus making fifths between treble C, D, and bass F, G.

At (*b*) we have another example of the same thing.

At (*c*) and (*d*) we have octaves approached in the same way.

These faults are called **hidden consecutive fifths** or **octaves** because the absence of the intervening notes (shown above in small notes) *hides* the fifth from the eye although their ill effect is heard.

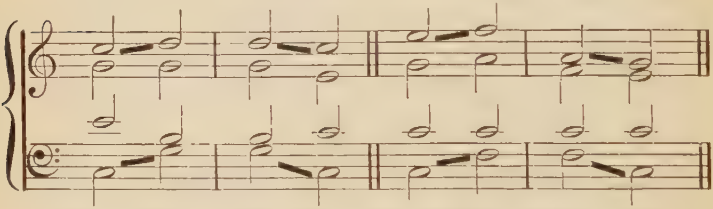
315. Hidden consecutives are bad *only* between the extreme parts.

316. There are several exceptions to the rule against *hidden consecutives*. For the present, the most important of these are the following:

There is no objection to *hidden consecutives* between the extreme parts when the chord on the **tonic** moves to the chord on the **dominant** or *vice versâ*, or when the **tonic** chord moves to the **subdominant** and *vice versâ, provided the upper part moves only by the step of a second.*

FIG. 153.

Allowable Hidden Consecutives.



EXERCISES.

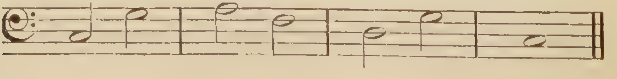
In working the following, the student must avoid consecutive fifths, &c., between *any* parts, and in writing the treble see that the rules on *hidden consecutives* are followed.

NOTE.—The final chord usually has the root (tonic) in the treble, but it *may* have either *root*, *third*, or *fifth*.

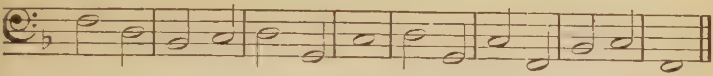
Take special care with the distribution of the first chord in a F. B. exercise. If one distribution does not work well begin again, trying another. Try to make the treble part as melodious as possible.

Add three upper parts to the following basses, using common chords:

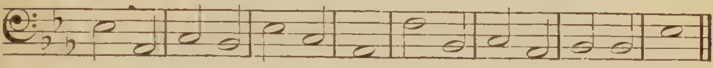
(1)



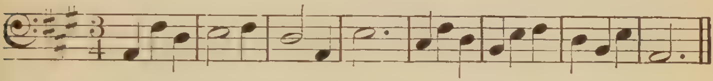
(2)



(3)



(4)



** *Before passing to the next chapter it would be well to study §§669–87 on harmonising melodies, and to do the exercises set in Section I.*

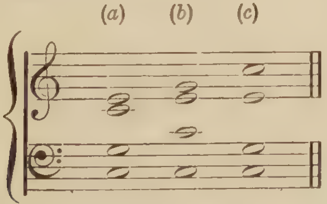
CHAPTER XXVII.

FIRST INVERSIONS IN MAJOR KEYS.

317. The note from which a chord is built up by adding *thirds* is called the **root** of the chord.

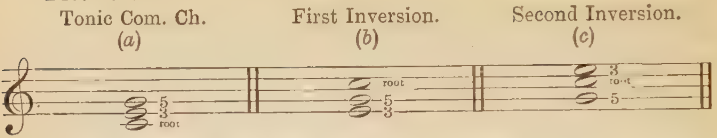
So long as the *root* is in the bass, the other notes of a chord may be altered in position without altering the nature of the chord. Thus (*a*), (*b*), (*c*) in fig. 154 have each a different distribution of the parts, but they are all the same chord because the *root* remains in the bass.

FIG. 154.



318. When a chord has in the bass any other note than its root the chord is said to be **inverted**.

Fig. 155.



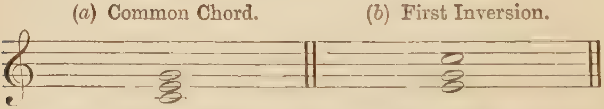
(*a*) is the common chord with the *root* in the bass.

(*b*) is the same chord, but now the root is in the upper part, and the *third* of the original chord is in the *bass*. This is called the **first inversion** of (*a*).

(*c*) is the same chord again, but now the *fifth* of the original chord is in the *bass*. This is called the **second inversion** of (*a*).

319. The **first inversion** of a common chord has the *third* of the original chord in the bass; the *root*, being inverted, is now the sixth note from the bass, and the *fifth* is a third from the bass. A **first inversion**, therefore, consists of a bass-note with the **third** and **sixth** above it.

Fig. 156.



320. Carefully distinguish between *root* and *bass*. The root is the note from which a chord is built up by adding thirds; the bass-note is the note which happens to be lowest, *e.g.* in (*b*) fig. 156, E is the bass-note, but it is *not* the root.

N.B. In dealing with inversions of chords it is best to *think of each note in relation to the chord from which the inversion came*, *e.g.* fig. 156 (*b*) C is the root; G is the fifth, E is the third.

321. **Figured Bass.** In writing exercises on basses it is necessary to indicate what chords are to be used. This is done by figures placed (usually) under the bass, and a bass with such figures is called a **Figured Bass.**

The figures indicate the *interval* of each note of a chord *from the bass-note.*

322. Since the notes of a *common chord* are the root with its third and fifth, the figuring[1] for a common chord is $\substack{5\\3}$; but, as a rule, no figures are used with common chords, it being understood that a bass-note without figures has a common chord (§ 363).

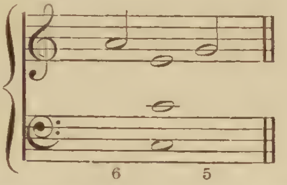
---

[1] It is not usual to indicate the doubled note of a chord in the figuring, though this is sometimes done for some special reason; the figuring for a common chord with the root doubled is then $\substack{8\\5\\3}$.

323. The figuring for a *first inversion* is $^{6}_{3}$ or 6, for very frequently the 3 is omitted from the figuring, and thus the figure 6 implies a third as well. On this account a first inversion is often called a **chord of the sixth.**

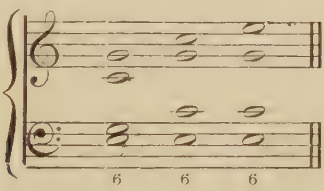
324. Sometimes a first inversion is followed by a common chord on the same bass-note. The figuring for the common chord cannot then be omitted, the figuring for the two chords being 6 5.

FIG. 157.



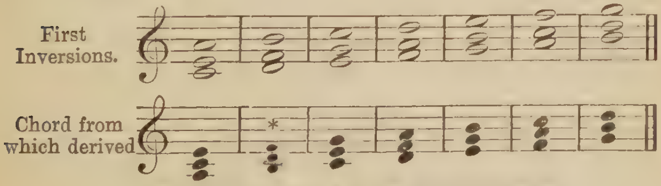
325. In figured bass the figures are almost always arranged with the highest uppermost. But it must be distinctly understood that the figures do not (as a rule) indicate the *arrangement* of the chord, but merely its constituent notes. Thus the following are all figured 6.

FIG. 158.



326. All the common chords of the major key and the diminished triad on the leading-note (§ 312) can be used in their *first inversion.* There is, therefore, a **chord of the sixth** on every degree of the *major scale.*

FIG. 159.



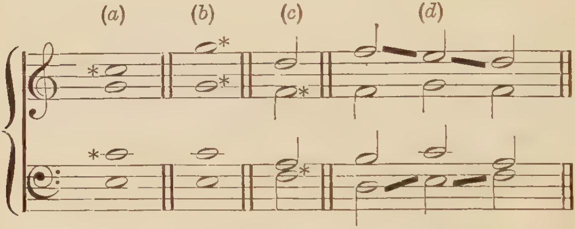
The chord marked * is the diminished triad.

327. **Doubling.** The rules for doubling in a *common chord* apply equally to a *first inversion.* The best note to double is the *root* (*a*); the next best is the *fifth* (*i.e.* the third of the first inversion) (*b*).

When the bass-note is the *minor* third from the root it is often advisable to double it (*c*).

328. When the *bass* of a *first inversion* is the **major third** from the root it **must not be doubled** unless the two parts having the doubled note move to it and from it by the step of a second and in *contrary* or *oblique* motion (*d*).

FIG. 160.

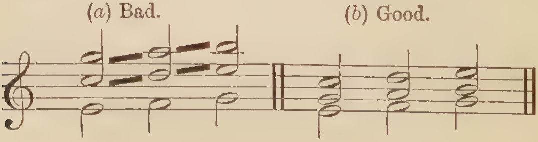


When there is a succession of *chords of the sixth* on a bass moving *stepwise* special care must be taken to avoid consecutives.

329. The first point to be attended to is the position of the *fifth* (*i.e.* the third from the bass). If the *fifth* is placed in the highest part it will be a fifth above the inverted root, and if we have a succession of chords similarly arranged it is clear that we shall get a series of *consecutive fifths* (*a*).

330. This can be avoided by keeping the *root* in the *upper* part (*b*). For then the interval from fifth to root is a fourth, and there is no objection to *consecutive fourths* if they occur between *upper* parts (§ 442).

FIG. 161.

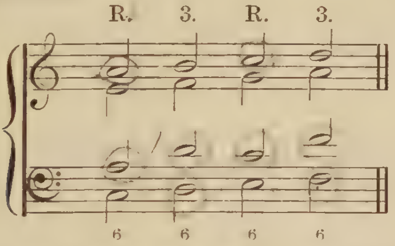


331. In actual composition such a series of first inversions on basses moving stepwise is usually written in three parts. If they are written in four parts another precaution is necessary which may be expressed as follows:—

332. When a succession of *first inversions* on a bass moving stepwise is written in *four* parts, the **same note of the chord must not be doubled in two successive chords.**

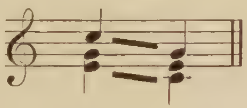
The best plan is to double the *root* and *third* alternately, though sometimes the *fifth* must be doubled. Of course the *leading-note* must *not* be doubled.

FIG. 162.



333. **Note on Hidden Consecutives** (§ 314). When a chord moves from a first inversion to the root position of the same chord, there is no ill effect of hidden consecutives.

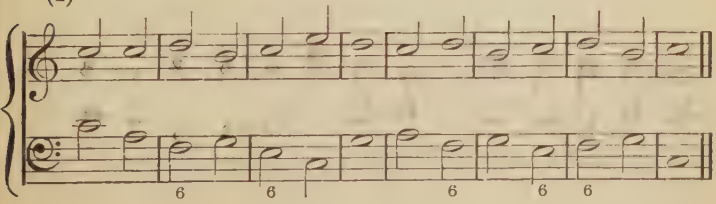
Good.



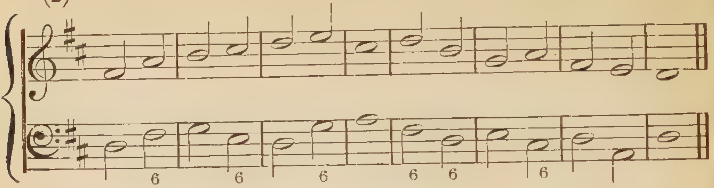
EXERCISES.

1. Add two inner parts.

(1)

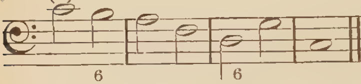


(2)

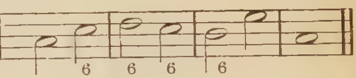


2. Add three upper parts to the following:

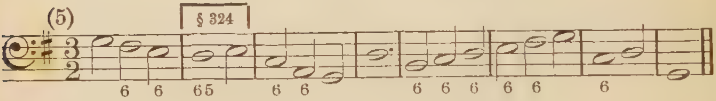
(3)



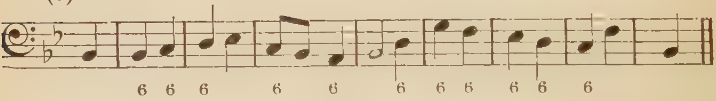
(4)



(5)



(6)



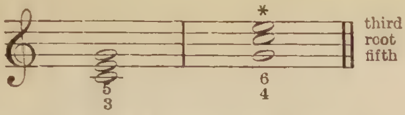
CHAPTER XXVIII.

SECOND INVERSIONS OF COMMON CHORDS IN MAJOR KEYS.

334. The **second inversion** of a common chord has the *fifth* in the bass; the *root* is then a *fourth* above the bass, and the *third* is a *sixth* above the bass. The chord is therefore **figured** $^6_4$, and it is often called the *chord of the six-four*, or the *six-four*.

335. The student should play this chord, the $^6_4$, on the piano, when he will notice that it has an unfinished effect, as if it required to be followed by some other chord. This is because the root is now a fourth above the bass, and the *interval of a fourth from the bass always has a dissonant effect* (*v.* § 442).

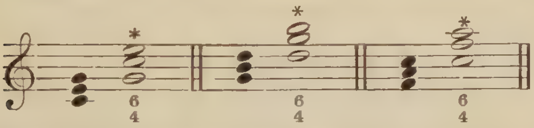
FIG. 163.



336. **Doubling.** In a 6-4 chord the **fifth** (i.e. *bass-note*) is y far the best note to double, though either of the others *may* e doubled.

337. The *only* [1] common chords which can be used in the *econd inversion* are those on the *tonic*, *dominant*, and *sub-ominant.*

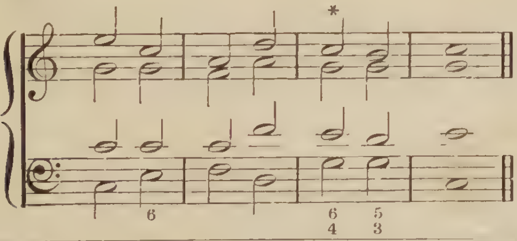
FIG. 164.


(*a*) Tonic. (*b*) Dominant. (*c*) Subdominant.

338. Second inversions, then, can only occur on (*a*) the **dominant**, (*b*) on the **supertonic**, (*c*) on the **tonic**.

339. The *second inversion* most used is that on the *dominant.* It [2] often occurs before a *perfect cadence*, as in the following example:

FIG. 165.



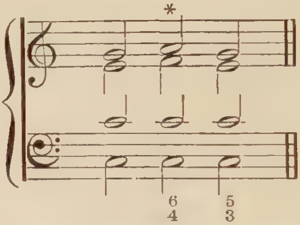
---

[1] Examples will be found in the great composers of second inversions of all the common chords, but second inversions require such delicate handling that the student is strongly urged to confine his attention to those mentioned in the text.

[2] This is often called a *cadential six-four.*

340. In the same way the *second inversion* on the *tonic* is often used before the common chord on the tonic.

FIG. 166.



341. Owing to the dissonant nature of the root in a six-four chord it is subject to very stringent rules as regards the way in which the bass moves to it and from it. Although the student will not require these rules until he has to harmonise melodies, it will be well to give them here to complete the subject.

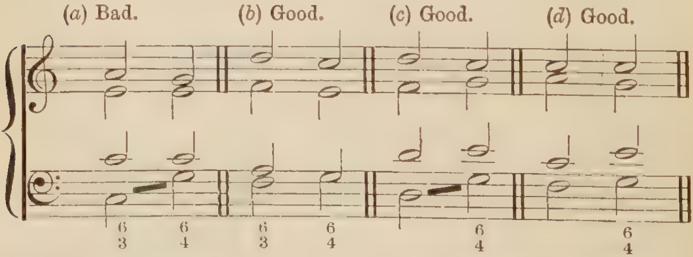
342. I. Rules for approaching a 6-4 chord.

(1) A six-four chord may be preceded by a chord on the same bass-note (fig. 166), or by a chord on some other bass-note (fig. 165).

(2) When the chord before the six-four is a *first inversion* the **bass-note must proceed by step**, *i.e.* must *not* leap.

(3) When the chord before a 6-4 is in its *root* position the bass may either leap or proceed by step.

FIG. 167.


(*a*) Bad. (*b*) Good. (*c*) Good. (*d*) Good.

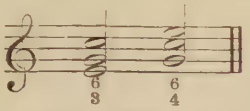
At (*a*) the chord before the 6-4 is a *first inversion* and therefore the bass must not leap.

At (*b*) we again have a first inversion, but the bass proceeds by step.

At (*c*) the bass leaps, but it is from a chord in its root position.

343. This rule, of course, does not apply to a six-four preceded by a first inversion of the same chord.

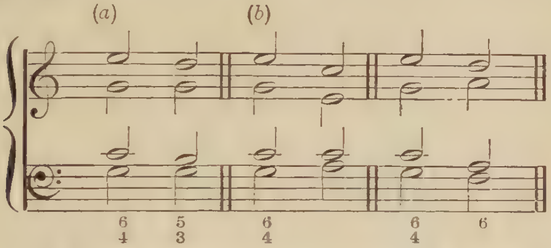
Fig. 168. Good.



344. II. Rule for leaving a 6-4 chord.

A 6-4 chord must be followed by a chord—either (*a*) on the *same* bass-note, or (*b*) on the *next* bass-note above or below it.

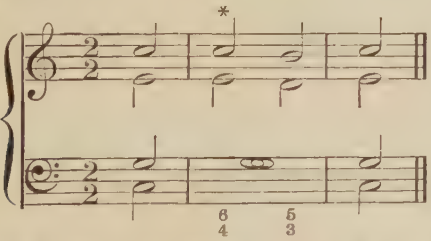
Fig. 169.



345. III. Rules for the 6-4 with regard to accent.

(1) When a 6-4 chord is *followed* by a chord on the *same* bass-note, the 6-4 must occur on the accented part of the bar, unless it is also *preceded* by a chord on the same bass-note as in fig. 166.

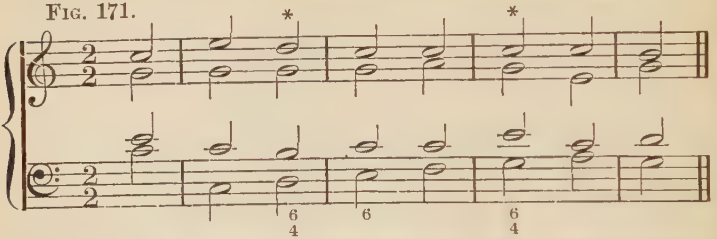
Fig. 170.



When a 6-4 is followed by a common chord on the *same* bass-note it is necessary to add figures after the 6-4 to indicate the common chord, as in the second bar above. This also shows the sequence of the parts; the sixth goes to the fifth, the fourth goes to the third, the other parts remaining stationary.

(2) If a 6-4 is followed by a chord on another bass-note, the 6-4 may occur either on the accented or unaccented beat.

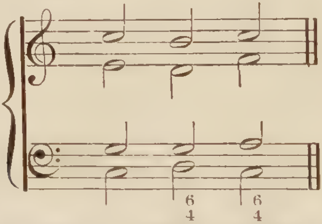
Fig. 171.



346. In one case, and in **one case only**, can there be two six-fours in succession, viz. the six-fours on the **supertonic** and **tonic**.

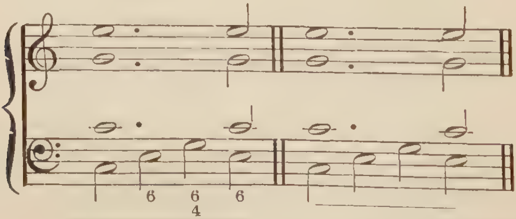
In using these another law of part-writing is necessary: No part may move in **consecutive fourths**[1] **with the bass**. Consecutive fourths *between upper parts* are unobjectionable.

Fig. 172.



347. Sometimes the bass of a common chord moves in *arpeggio* (§ 658), while the upper parts remain stationary. In these cases chords of the sixth and the six-four are produced. These may be figured in the ordinary way (*a*), or a long line may be drawn under the arpeggio bass (*b*); the line indicating that while the bass moves the upper parts remain, and the chord continues the same.

Fig. 173.


(*a*) (*b*)

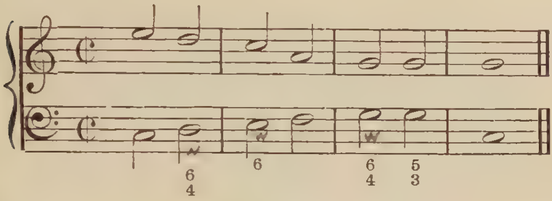
---

[1] There is *one* exception to this rule, v. § 442.

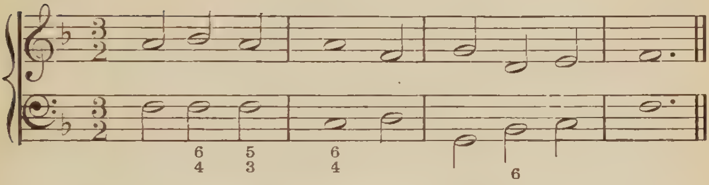
EXERCISES.

Add two inner parts to the following :

(1)

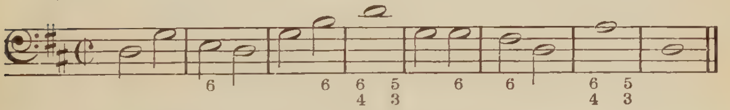


(2)

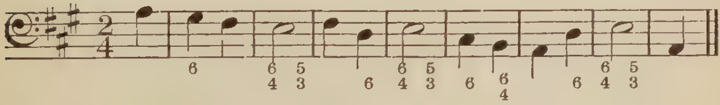


Add three upper parts to the following :

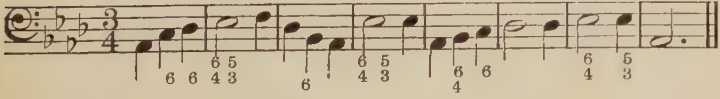
(3)



(4)



(5)



⁂ *For melodies v. p. 253.*

CHAPTER XXIX.

COMMON CHORDS IN MINOR KEYS.

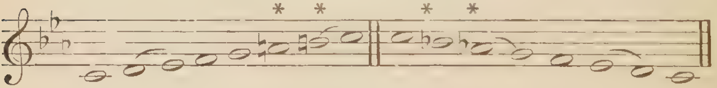
⁂ *A not unwelcome variety may be brought into the work by taking chapters xxxi., xxxii. before the present chapter. The exercises of those chapters are arranged to allow of this.*

348. The chief forms of the minor[1] scale are the *Diatonic* or *Melodic*, and the *Harmonic*.

349. In the **diatonic minor** scale the intervals from the *tonic* to the *sixth* and *seventh* notes are *major* in ascending; *minor* in descending.

Fig. 174.

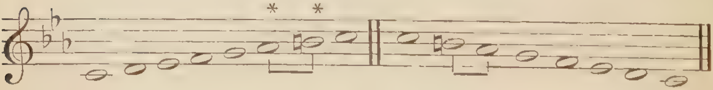
Diatonic Minor Scale.



350. In the **Harmonic minor** scale the interval from the *tonic* to the *sixth* is *minor*; from the *tonic* to the *seventh* is *major*, both ascending and descending.

Fig. 175.

Harmonic Minor Scale.



351. In fig. 151 we have seen that the chords in the major key are built up out of the notes of the major scale.

352. The chords in a minor key are made up out of the notes of the **harmonic minor scale.**

For the present, then, the student must dismiss from consideration the *diatonic minor*, and keep in mind that the notes he is to use in minor keys are those of the *harmonic minor*.

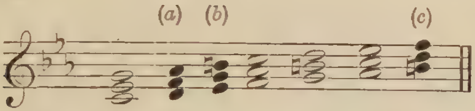
---

[1] For fuller details see Pt. I., Chapter XI.

353. The *major sixth* can never[1] be used as part of a chord, and the *minor seventh* only in one case, to be explained in § 369. How these notes are used in music—not as parts of chords—will be explained later (§ 532).

354. Let us build **triads** out of the *harmonic minor scale.*

Fig. 176.



355. We see that the second, third, and seventh of these triads are *not common chords*, because it will be remembered that a **common chord must have a perfect fifth** (§ 278).

356. The chord on the supertonic (*a*) has a diminished fifth, and so has that on the leading-note (*c*).

The chord on the mediant (*b*) has an *augmented fifth* (§ 642).

357. There are, then (fig. 176), **only four common chords** in each minor key, viz. on the **tonic, subdominant, dominant,** and **submediant.** Lah Rau

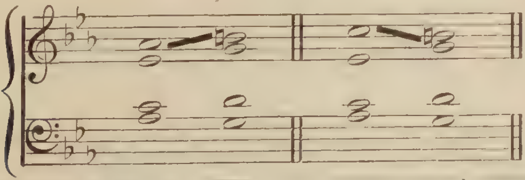
358. Notice specially that in *minor keys* the **dominant common chord is always major.**

359. In using common chords in minor keys the rules observed in the case of common chords in the major must be followed, but two of these are so important that it will be best to repeat.

360. **No part may move by an augmented interval.**

Thus in going from the common chord on the submediant to that on the dominant, the parts must not be arranged as at (*a*) because A♭–B♮ is an augmented second. They must be rearranged as at (*b*), for C–B♮ is minor second.

Fig. 177.

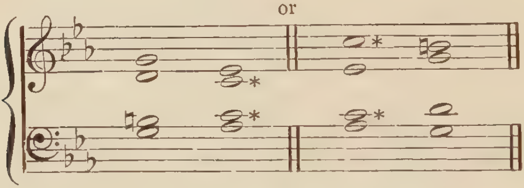

(*a*) Bad. (*b*) Good.

---

[1] This statement requires a slight qualification, but the beginner may rest satisfied with it for the present (§ 596).

361. In passing from the common chord of the *dominant* to the common chord of the *submediant*, or *vice versâ*, the dominant chord must be complete, and the **submediant chord must have its third doubled.**

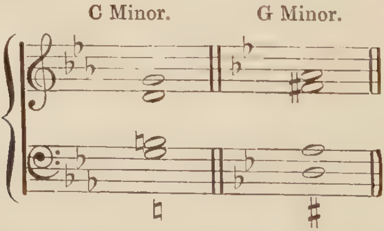
Fig. 178.



362. **Doubling.** As in § 281, the notes to be doubled (in order of advisability) are:—root, fifth, minor third; the leading-note, of course, must never be doubled.

363. **Figuring.** We have seen that the common chord is not usually figured, but the third of the dominant common chord in the minor always has an accidental, and *accidentals must always be shown in the figuring.* This is done by placing the necessary accidental underneath the bass-note, and it must be remembered that an *accidental standing alone* (*without a figure*) *under a bass-note always refers to the* **third** *of the chord.*

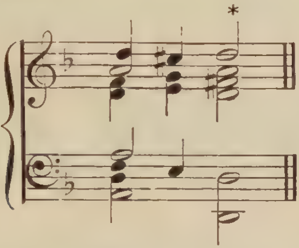
Fig. 179.



364. Formerly there was among musicians a great aversion to ending a composition with a *minor chord.* To avoid this the *third* of the last chord of a piece in a minor key was sometimes omitted altogether, the chord consisting of the *root* and *fifth*, an example of which can be seen in the last

movement of Mozart's 'Requiem.' But more frequently the *third* of the last chord was made **major**, as in the following example from the prelude to Bach's Fugue in D *minor*.

Fig. 180.



365. When the third of the final chord in a minor key is made major, it is called the **Tierce de Picardie** or *Picardy Third*. It is frequently used in modern music, especially in church music, *e.g.* in the 'Inflammatus' of Dvořák's 'Stabat Mater' (pub. 1881).

366. It is interesting to note that all the preludes (12) and fugues (12), in minor keys in Vol. I. of Bach's 'Wohltemperites Klavier' (written in 1722), with one exception end with the Tierce de Picardie.

Exercises.

1. Write out the *harmonic minor* scale of A, D, E, F, and F♯.

2. Write *triads* on all the degrees of the scale of G minor, and indicate which of these are *common chords*.

3. Write in four parts all the *common chords* in F♯ minor and C♯ minor.

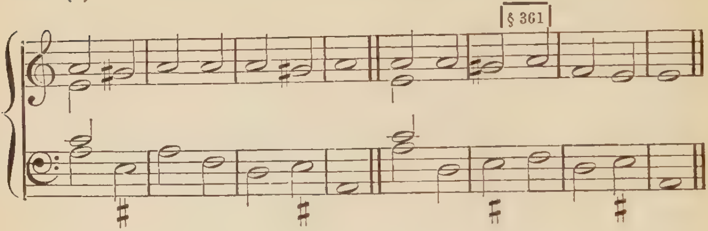
Note.—These chords are to be independent of each other and separated by double bars.

4. Write in four parts the *dominant* common chord correctly followed by the *submediant* common chord in E minor, D minor, and F♯ minor.

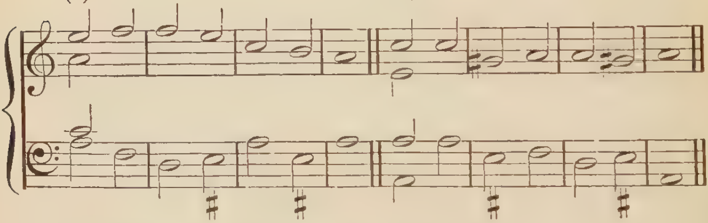
5. Write in four parts the *submediant* common chord correctly followed by the *dominant* common chord in A minor, F minor, and G minor.

6. Add two inner parts to the following:

(1) (2)

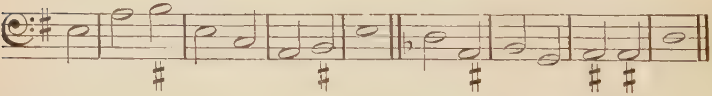


(3) (4)

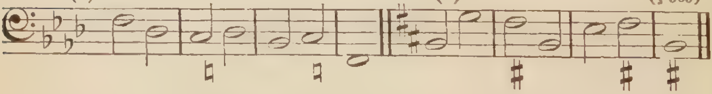


Add three upper parts to the following:--

(5) (6)



(7) (8)



CHAPTER XXX.

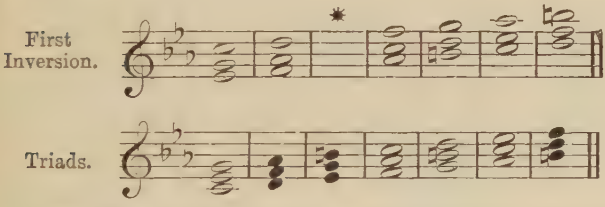
INVERSIONS OF TRIADS IN MINOR KEYS.

367. First inversions. The four common chords in minor keys can be used in their first inversion. It was pointed out (§ 326) that a diminished triad can be used in its first inversion, so that we shall have first inversions of the triads on the second and seventh degrees of the minor scale.

For the inversion of the triad on the mediant *v.* § 642.

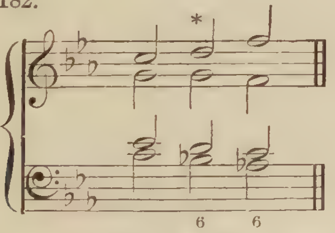
368. The following table will show the first inversions above described. The stave below shows the chords from which each first inversion is derived.

FIG. 181.



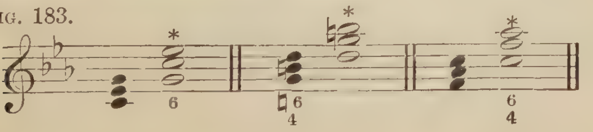
369. When the bass of a minor movement descends stepwise from the tonic to the minor sixth (as in the descending form of the diatonic minor scale), the seventh is made minor, and in this case, *and in this case only*, **the minor seventh of the scale may be used as the bass of a first inversion,** *v.* § 353.

FIG. 182.



370. **Second Inversions.** As in the major key, the only common chords to be used in the second inversion are those on the *tonic*, *dominant*, and *subdominant*, giving chords of the 6-4 on the **dominant, supertonic,** and **tonic.**

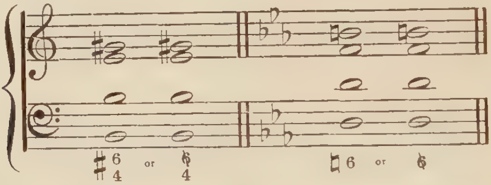
FIG. 183.



The rules for the treatment of second inversions in §§ 336–45 apply equally here, and the student will do well to recapitulate them.

371. **Figuring.** In the 6-4 (and the 6-3) on the supertonic in a minor key the sixth is the leading-note, and as this is always major (*i.e.* raised from its condition according to the signature) the figuring must always show an accidental. Sometimes instead of this accidental a stroke is drawn through the figure. Thus 6̸ means the raised sixth, *i.e.* either ♮6 (if by the signature it is flat) or ♯6 (if by the signature it is natural).

Fig. 184.



371*a*. **The origin of the minor scale.** In the construction of the melodies of the Mediæval Church eight different scales—commonly called **modes** or **Gregorian modes**—were used. These *modes* or scales began on different degrees but they *only used the natural notes* without inflection, so that the semitones did not occur in the same place in each mode as they do in the modern scales.

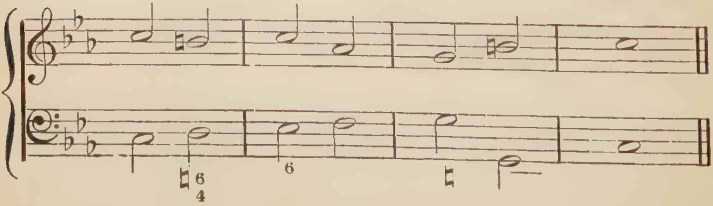
Of these modes, the *Æolian* beginning on A, the *Dorian* beginning on D, and the *Phrygian* beginning on E bore a certain resemblance to our minor scale, because they had each a minor third; but they had no leading-note. As music developed, it began to be necessary to raise the seventh note of these modes to make a leading-note, and by degrees the three modes merged into the **minor** scale as we know it.

We have already explained (Pt. I., §§ 122–5) why the sixth note of the minor scale is sometimes raised in ascending and restored in descending.

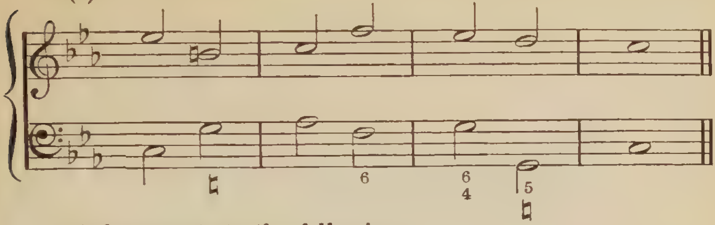
EXERCISES.

Add two inner parts.

(1)

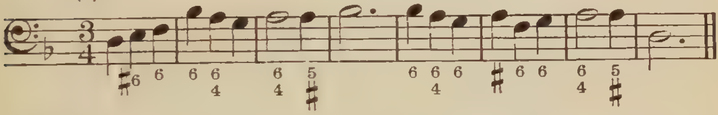


(2)

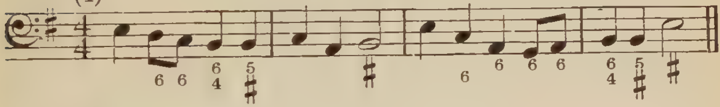


Add three parts to the following :

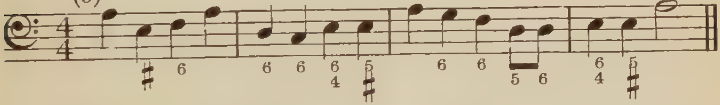
(3)



(4)

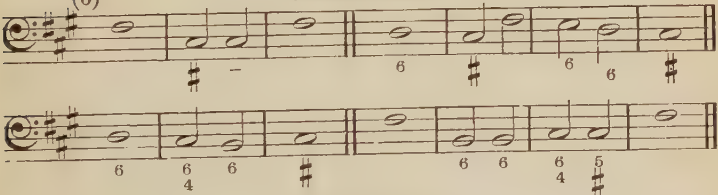


(5)



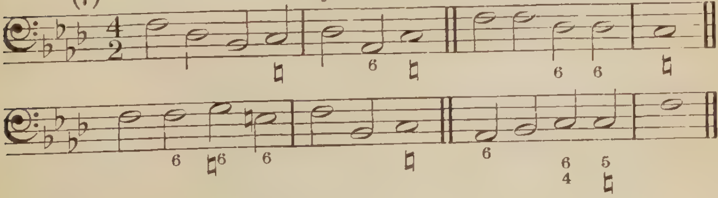
(6)

Double Chant.



(7)

Hymn Tune.



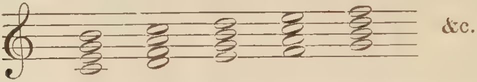
⁂ *For melodies v. p. 254.*

CHAPTER XXXI.

THE DOMINANT SEVENTH IN MAJOR KEYS.

372. By adding a *third* above any triad we get a *chord of the seventh.*

FIG. 185.



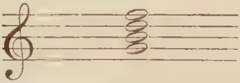
Of all the chords of the seventh, that on the *dominant* is the most important, and for the present we shall confine our attention to it.

373. The **dominant seventh** is obtained by adding a third above the dominant triad. It consists of the **dominant** (the root) with the **major third**, **perfect fifth**, and **minor seventh** above it.

NOTE that the major third is the *leading-note.*

FIG. 186.

Dominant 7th.

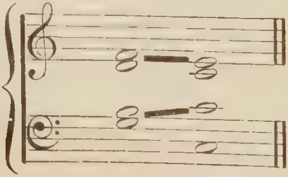


374. The dominant seventh introduces us to a series of chords differing very much from triads. All the notes of the triads yet dealt with are concordant (§ 271) to each other. But some of the notes forming the dominant seventh are **dissonant** to the others. Thus, from the root to the seventh is a dissonant interval. Again, from the third to the seventh is a *diminished fifth*, which also is dissonant.

A chord containing any dissonant interval is called a **discord**, and as explained in § 271, the notes forming the dissonance require **resolution.**

375. In the dominant seventh, the *seventh* and the *third* are dissonant, and in passing from a dominant seventh to a following chord the **seventh** must **fall a second** ; the **third** (*i.e.* the leading-note) must **rise a second.**

FIG. 187.



376. **Figuring.** The full figuring for a dominant seventh would be $\substack{7\\5\\3}$, but the figures 5 and 3 are usually omitted unless they are altered by an accidental. The usual figuring therefore is 7, and the figure 7 under a bass-note implies the third and fifth as well as the seventh.

377. **Doubling.** As the dominant seventh consists of four notes it can be used in four-part harmony without *doubling*.[1] Sometimes, however, the *fifth* is omitted, and then the *root* must be doubled. As *no dissonant note can be doubled*[2] the third and seventh must never be doubled.

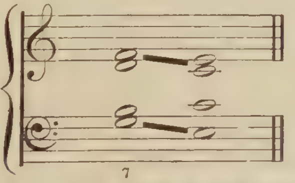
378. **Omission of notes from the dominant seventh.** The third and seventh are the distinctive notes of the chord and cannot therefore be omitted; and the root, of course, cannot be dispensed with. The fifth, then, is the only note which can be omitted.

Before dealing specially with the resolutions of the dominant seventh we shall state an important rule which applies to the resolution of *all* discords.

379. In resolving a discord **no note may proceed by similar motion to the note** (*or its octave*) **on which the dissonant note resolves.**

FIG. 188.

Bad.



The dissonant note F resolves on E, and the bass moves by *similar motion* to the octave E. This has the worst possible effect of hidden consecutives (§ 314).

380. **Resolution**[3] **of the dominant seventh.** The dominant seventh may be followed by any chord which allows the dissonant notes—the seventh and third—to resolve properly.

---

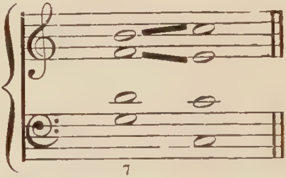
[1] When the dominant seventh is used in harmony of more than four parts, either root or fifth may be doubled.

[2] Since a dissonance must always resolve, if a dissonant note is doubled both notes would have to be resolved alike, and we should get consecutive unisons, or octaves (§ 296).

[3] These resolutions should be played over on the piano and learnt, so that the student may be able to hear them *mentally* when seen on paper.

381. The commonest resolution of the dominant seventh is on the **tonic triad**. The *seventh* must fall a second; the *leading-note* must rise a second. The *root* rises a fourth (or falls a fifth), and the *fifth* may go to the root or third of the next chord.

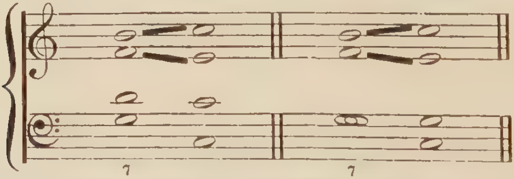
Fig. 189.



382. When, as in this case, the dominant seventh is resolved on the tonic triad, one of the chords, if in four parts, *must* be incomplete.[1] If the dominant seventh is complete the tonic triad will omit the fifth. If the triad is complete the seventh must omit the fifth and double the root.

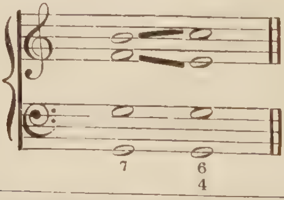
Fig. 190.

(*a*) Dom. 7th complete. (*b*) Dom. 7th incomplete.



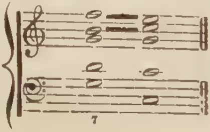
383. The tonic triad on which the dominant seventh resolves is often in the second inversion, in which case it is better to have the seventh incomplete (compare § 336).

Fig. 191.



---

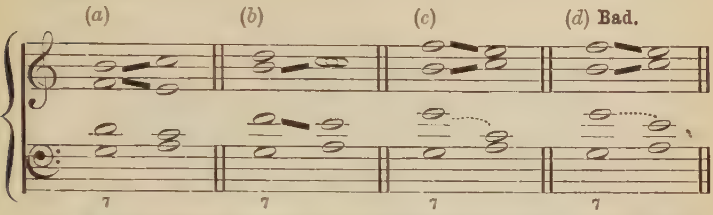
[1] In harmony of five parts both chords can be complete.



384. Another common resolution of the dominant seventh is on the triad of the submediant.

As before, the seventh must fall, the leading-note must rise.

Fig. 192.



385. In this resolution care must be taken with the fifth of the dominant seventh. If it rises a second we get consec. fifths with the bass, and it must therefore fall to the third of the next chord.

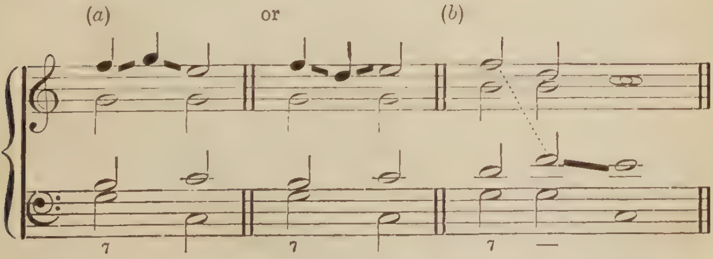
If as at (*c*) the dom. seventh has the root doubled a greater danger is present —that of taking (as at *d*) the doubled root to the octave of the note on which the seventh resolves (§ 379).

386. We may, therefore, give the following rule:—**When the dominant seventh is followed by the triad on the** *submediant*, **the second chord must have its third doubled**, and it is best to have the dom. seventh complete, as at (*a*) and (*b*), rather than as at (*c*).

387. **Ornamental Resolution.** Before resolving, the seventh may proceed to another note (either root or fifth) of the chord, provided that it eventually proceeds to its proper resolution (*a*).

Or the seventh may be transferred to another part, where it must be resolved (*b*).

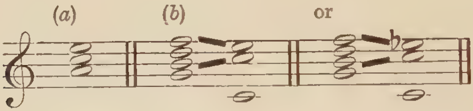
Fig. 193.



*** *Other resolutions of the dom. seventh will be found in* §§ 485–7.

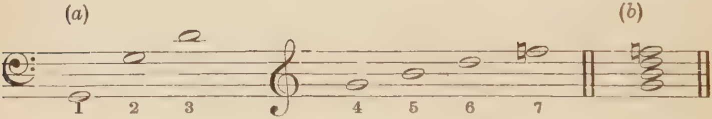
388. The *dominant seventh* is of great importance in harmony, from the fact that it definitely determines the key, though not the mode. The chord (*a*) in fig. 194 may be in C or G or F major; but the chord (*b*) can only be in C major or minor (*v.* § 408).

Fig. 194.



389. If we examine the *Harmonic Series* explained in Part I., § 155, we find that, besides the octaves of the root or generator, the earliest intervals formed by the harmonics are the *major third*, *perfect fifth*, *minor seventh*. Thus if we write out the first seven harmonics of G (*a*) and then use the last four of these we get the dominant seventh on G (*b*).

Fig. 195.



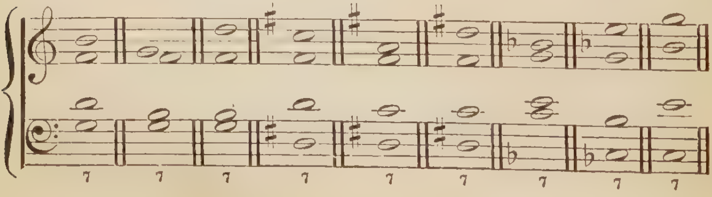
390. When a discord is formed by notes which are among the harmonics of the root of that discord, it is called a **fundamental discord** because it is founded on the harmonic series.

The *dominant seventh* is therefore a *fundamental discord.*

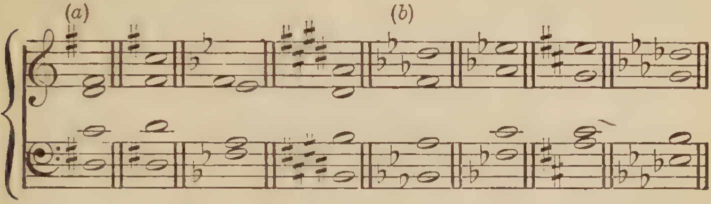
Exercises.

1. Write the dominant seventh in the following major keys, using correct key-signature:—G, D, A, F, B♭, E♭.

2. Correctly resolve each of the following dominant sevenths on the tonic triad:—



3. Resolve the dominant sevenths in (*a*) on the second inversion of the tonic triad; resolve those in (*b*) on the triad of the submediant.

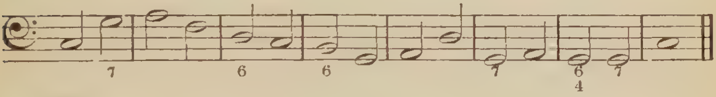


4. Write the dominant seventh in E, D, A, A♭, D♭, and B major; and resolve each in three ways.

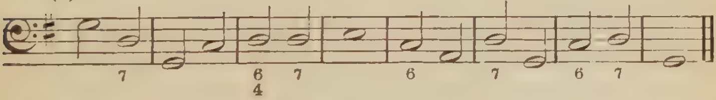
5. Write the dominant seventh *in* F major; write the dominant seventh *on* F.

6. Add three upper parts to the following:—

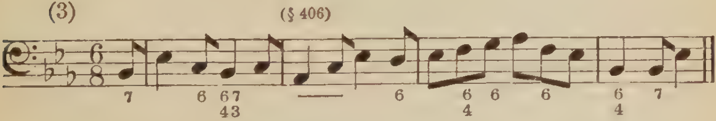
(1)



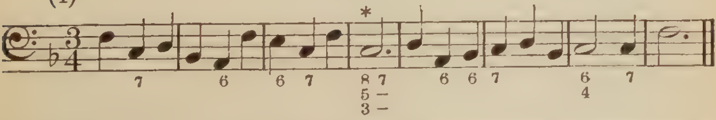
(2)



(3)



(4)



---

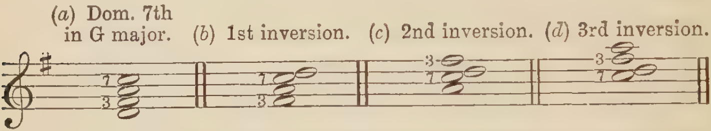
* This figuring means that the first chord of the bar (a minim) is a com. ch. with the root doubled; on the third beat this doubled root descends to the seventh, which with the third and fifth remaining forms a dom. seventh.

CHAPTER XXXII.

INVERSIONS OF THE DOMINANT SEVENTH.

391. As there are four notes in the dominant seventh, there will be three inversions.

Fig. 196.


(*a*) Dom. 7th in G major. (*b*) 1st inversion. (*c*) 2nd inversion. (*d*) 3rd inversion.

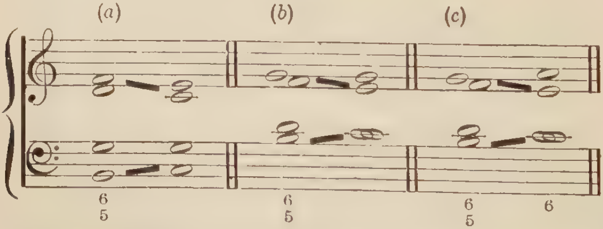
392. In dealing with these inversions it is necessary to bear in mind which were the dissonant notes (*i.e.* seventh and third) of the original chord, for they are treated in the inversions exactly as they were treated in the original chord, *i.e.* **the seventh falls a second; the third rises a second.** Thus in fig. 196 we have the dominant seventh in the key of G. The seventh is C; the third is F♯, and in all the inversions C the seventh must fall, and F♯ the third must rise.

393. The **first inversion** has the **leading-note in the bass.** The root being inverted is now a sixth from the bass, and the chord consists of the bass-note, with the *third*, *fifth*, and *sixth* above it (fig. 196 (*b*)).

394. The **Figuring**[1] in full would be $\substack{6\\5\\3}$, but the 3 is usually omitted from the figuring unless it requires an accidental.

395. **Resolution.** The 1st inversion or $\substack{6\\5}$ usually resolves on the tonic triad. The *bass* (*i.e.* the leading-note) *must rise*; the *fifth* from the bass (*i.e.* the seventh of the original chord) *must fall* (fig. 197 (*a*) (*b*)).

Fig. 197.



396. If the $\substack{6\\5}$ is followed by the submediant triad this latter chord must

---

[1] Remember that the figuring indicates the interval between each note of the chord and the *bass-note*.

be in its first inversion, for, as the bass of the $^6_5$ is the leading-note, it must rise (*c*). This resolution of a $^6_5$ is not very often used.

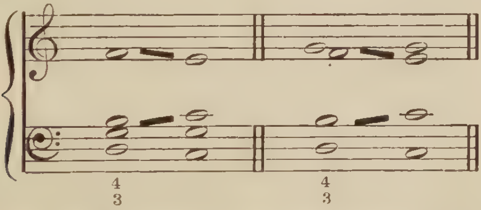
397. The **second inversion** of the dominant seventh has the supertonic in the bass. Both the root and the third are now inverted, and become respectively the fourth and sixth from the bass (fig. 196 (*c*)).

398. **Figuring.** It is figured $\begin{smallmatrix}6\\4\\3\end{smallmatrix}$ or $^4_3$.

Evidently the 3 cannot be omitted from the figuring, for then there would be nothing to distinguish this chord from the $^6_4$ (§ 334). But the 6 is often omitted, and $^4_3$ under a note means that the sixth as well as the fourth and third are to be added.

399. **Resolution.** The $^4_3$ is usually resolved on the tonic triad in its root position. As in the original chord and in the $^6_5$, the *seventh falls* a second, the *third rises* a second.

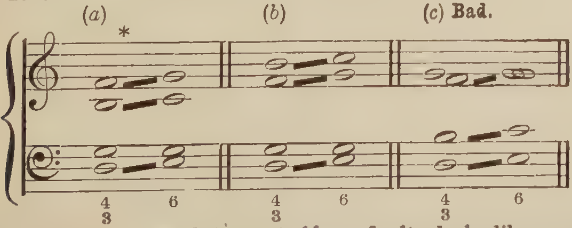
FIG. 198.



400. Sometimes the $^4_3$ resolves on the first inversion of the tonic triad. In this case the bass rises to the third of the next chord, and the *seventh* may either *fall* as usual, or (to avoid doubling the major third of the next chord) it *may rise*.

This is the **only case in which the seventh is allowed to rise.**

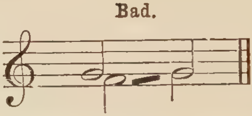
FIG. 199.



* The progression here between treble and alto looks like consecutive fifths, but this is allowable because one of these fifths is diminished, *v.* § 436.

401. In using the resolution described in § 400 the student must avoid a progression like that between alto and treble at (*c*). No two parts may go from a second to a unison.

FIG. 200.



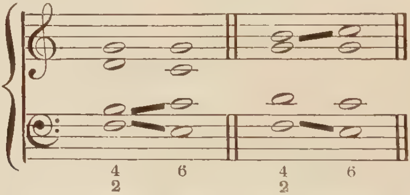
To avoid this, see that the *seventh* is above the root as at (*a*) and (*b*) (fig. 199).

402. The **third inversion** of the dominant seventh has the **sub-dominant** in the bass. The *root*, *third*, and *fifth* are now inverted, and become respectively the second, fourth, and sixth.

403. **Figuring.** This chord is figured $\begin{smallmatrix}6\\4\\2\end{smallmatrix}$ or $\begin{smallmatrix}4\\2\end{smallmatrix}$.

404. **Resolution.** The $\begin{smallmatrix}4\\2\end{smallmatrix}$ usually resolves on the first inversion of the tonic triad. The seventh (the bass-note) falls a second; the leading-note rises a second.

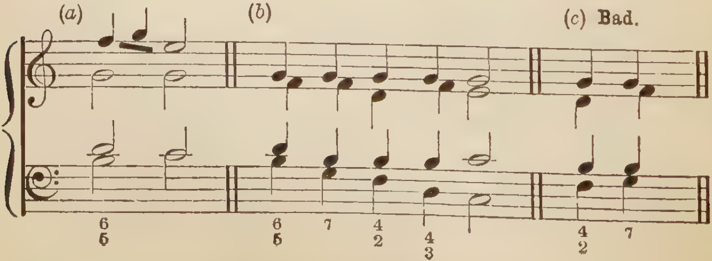
FIG. 201.



405. As in the case of the original chord (§ 387), the dissonant notes in the inversions of the dominant seventh may be resolved ornamentally (*a*).

Or the different inversions may follow each other, provided that the dissonant notes are finally resolved (*b*). But the last inversion must not be followed by the root position of the original chord, as the effect of the seventh rising is bad (*c*).

FIG. 202.

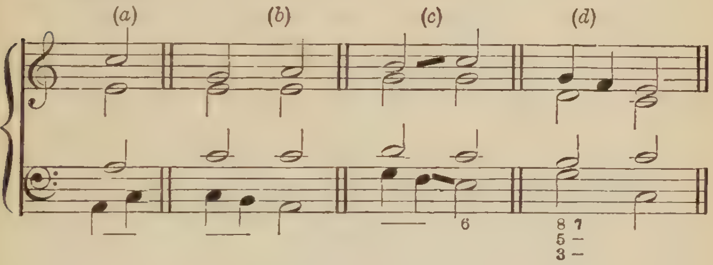


406. **A horizontal line** —— placed under two or more bass-notes means that the chord belonging to the first bass-note is to be continued though the bass moves, and as a rule[1] the three upper parts remain stationary as at (*a*), (*b*), (*c*).

When as at (*c*) this line stands under a bass descending from *dominant* to *subdominant*, the **third inversion of a dominant seventh** is produced, and care must be taken to resolve this discord.

Horizontal lines used as at (*d*) mean that the notes indicated by the figures with lines are to be continued while the other part moves.

FIG. 202 *bis*.



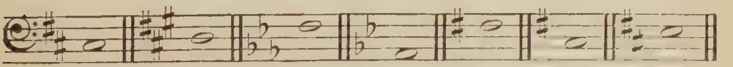
EXERCISES.

1. Write the dominant seventh in the key of D major, and resolve it on the tonic triad; write each of the inversions of this chord, and resolve on the tonic triad, or on one of its inversions. Figure each chord.

2. Do the same in the following keys: D major, A major, A♭ major, E♭ major.

3. Write and correctly resolve the second inversion of the dominant seventh in E major and in F major.

4. Write on each of the following bass-notes the inversion of the dominant seventh which can occur on that note. Correctly resolve, and figure the bass (*v.* §§ 393–402).

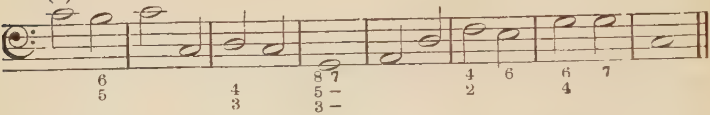


---

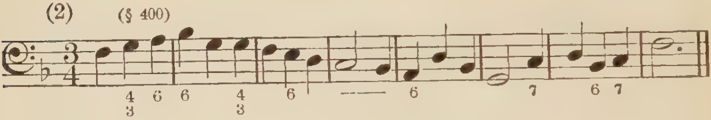
[1] *See*, however, § 546.

5. Add three upper parts to the following :—

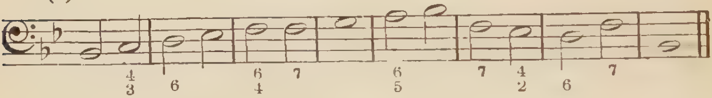
(1)

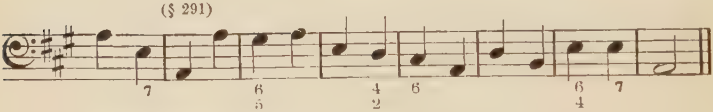


(2)



(3)





*** *For melodies v.* p. 255.

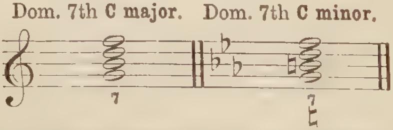
CHAPTER XXXIII.

THE DOMINANT SEVENTH IN MINOR KEYS.

407. The **dominant seventh in minor keys**, just as in major keys, is formed by adding a third above the dominant common chord.

408. As the dominant common chord in minor keys always has the leading-note (*i.e.* the raised seventh) for its third, it is clear that the dominant seventh is exactly the same chord whether the key be major or minor.

FIG. 203.


Dom. 7th **C major.** Dom. 7th **C minor.**

409. The 3rd of the dom. seventh in the minor always has an accidental, and this must be indicated in the figuring by placing the required accidental under the figure 7 (§ 363).

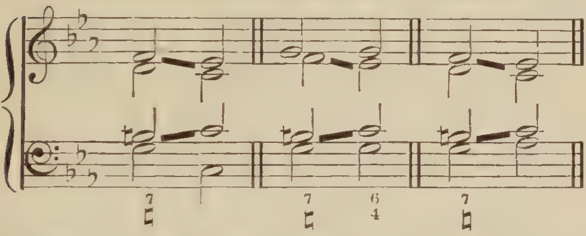
410. The dominant seventh in minor keys is exactly like that in major keys, and it is subject to the same rules for doubling and resolving explained in §§ 375–84.

In resolving, the leading-note (the third) must rise a second; the seventh must fall a second.[1]

The two most usual resolutions are shown below:—

FIG. 204.

(a) Resolved on tonic com. chd. (b) Resolved on sub-mediant com. chd.

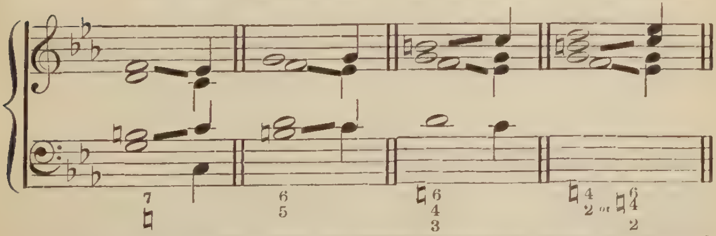


411. The **inversions of the dominant seventh** in the minor are exactly like those in the major. They are shown below, with their figuring and resolutions.

412. Notice that, except when the leading-note is in the bass, the figuring will have an accidental. In the second inversion the leading-note is a sixth from the bass, and so the 6 must have the accidental, and of course it cannot then be omitted from the figuring. In the last inversion the leading-note is a fourth from the bass, and in the figuring the 4 has the accidental.

FIG. 205.

Dom. 7th. 1st inversion. 2nd inversion. 3rd inversion.



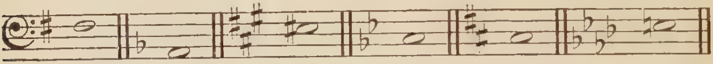
---

[1] In the *major* the seventh falls a semitone; in the *minor* it falls a tone, in each case going to the third of the scale.

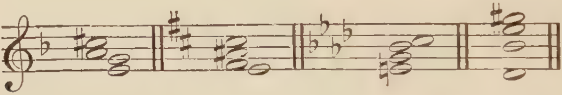
EXERCISES.

1. Write in four parts the dominant seventh and all its inversions with proper figuring in A, E, D, and G minor.

2. Write with proper figuring the dominant seventh or inversion which can occur on each of the following bass-notes, the key being *minor*:—

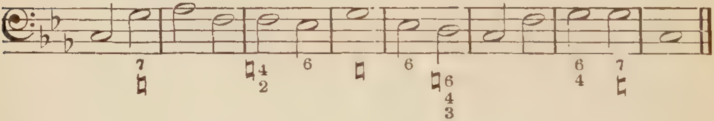


3. Figure the following chords and name the root (§ 276) of each:—

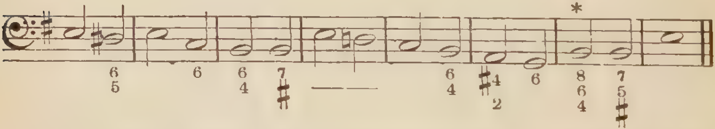


4. Add three upper parts to the following basses:—

(1) (§ 386)

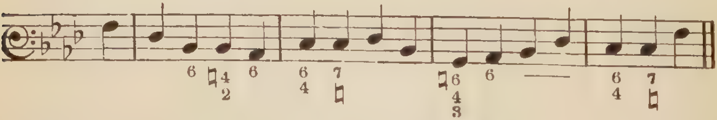


(2)

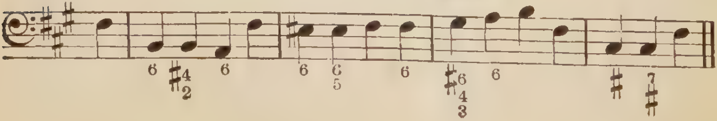


* The 8 merely means that the bass is doubled. In proceeding to the next chord 8 goes to 7; 6 to 5, and 4 to 3.

(3)



(4) (§ 400)



CHAPTER XXXIV.

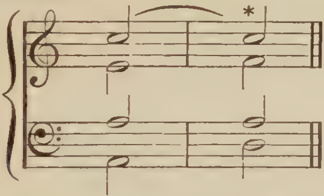
SECONDARY OR NON-DOMINANT SEVENTHS.

413. A *third* added above a triad gives us a chord of the seventh. All such chords except that on the *dominant* are called **secondary** (or *non-dominant*) **sevenths.**[1]

414. **Secondary sevenths** differ from dominant sevenths in their use by the fact that the *seventh* (the dissonant note) must be **prepared.**

415. **Preparation** of a dissonant note means the sounding of that note as a *consonant* note in the preceding chord. Preparation must occur in the same part or voice as the dissonance (*v.* § 492).

Fig. 206.

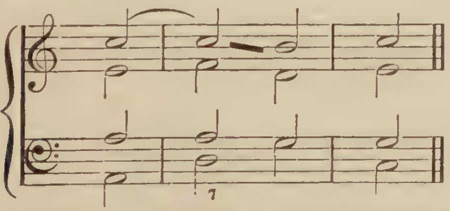


* Here C is the *dissonant* note, being the seventh from the root. It is prepared by being sounded (by the same voice) in the preceding chord as a *consonant* note.

416. **Resolution.**—Secondary sevenths are resolved on a chord the root of which is a *fourth* above the root of the seventh. The *seventh* falls a second; the *bass* rises a fourth.

417. As the *third* of a secondary seventh is not the leading-note it is free to rise or fall.

Fig. 207.



---

[1] Called also *diatonic sevenths* and *essential discords.* See explanation in § 547.

418. Any secondary seventh may be used provided there is no objection to the triad from which it is formed, and provided that the chord on which it would resolve is allowable.

The chords of the seventh on the *subdominant* and the *leading-note* are not used except in *sequences* (§ 464) on account of the nature of the triads, on the *leading-note* and *mediant* respectively, on which they would resolve (§ 312).

419. The secondary sevenths commonly used are :—

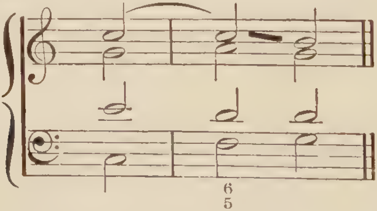
In **major** keys, those on the *tonic*, *supertonic*, *mediant*, and *submediant*. In **minor** keys, those on the *supertonic* and *mediant*.

The secondary seventh most used is that on the **supertonic.** It very often precedes a *perfect cadence*, as in fig. 207.

420. **Inversions of secondary sevenths.**—Like the dominant seventh, secondary sevenths have three inversions, but only the first and third are used.

421. The **first inversion** has the third in the bass. The seventh now becomes the fifth from the bass, and it must resolve as in the original chord, by descending a second. The *bass* (being the third of the original chord) now rises a second to the root of the resolution. It is figured $\begin{smallmatrix}6\\5\end{smallmatrix}$.

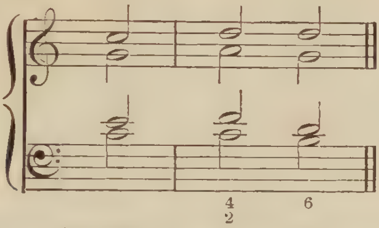
FIG. 208.



422. The **third inversion** has the seventh in the bass. It resolves on the first inversion of a common chord, the bass (the seventh of the original chord) falling a second. It is figured $\begin{smallmatrix}4\\2\end{smallmatrix}$ or $\begin{smallmatrix}6\\4\\2\end{smallmatrix}$.

423. As this third inversion resolves on the first inversion of a com. ch. it can occur on any note of the scale which will allow of this resolution, viz. in the **major** on every note; in the **minor** on the *tonic*, *supertonic*, *mediant*, and *dominant*.

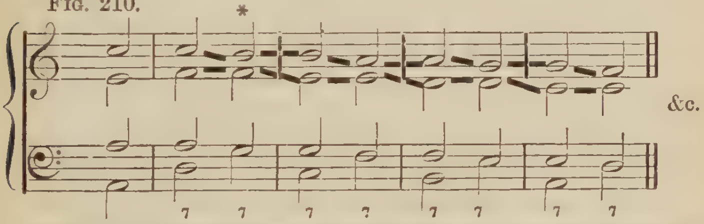
FIG. 209.



424. A sequence (§ 464) of chords of the seventh on **roots** rising a fourth or falling a fifth is of common occurrence.

When such a sequence is in four parts the chords will be alternately complete and incomplete to avoid consecutive fifths (compare § 382). In five parts all the chords will be complete.

FIG. 210.

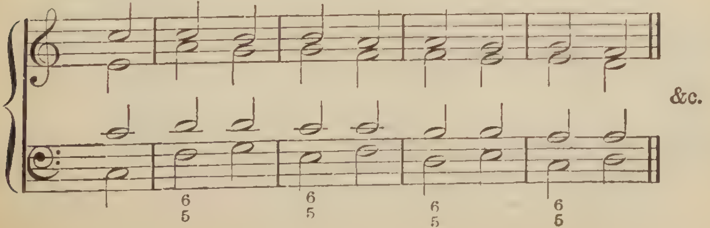


NOTES.—1. The third of each chord remains (*i.e.* is *prepared*) to be the seventh of the following chord.

2. At * the dominant seventh is prepared. This is not necessary, but it is always allowable.

Fig. 211 shows a sequence consisting of sevenths in the first inversion, followed by common chords.

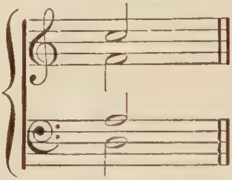
FIG. 211.



425. Secondary sevenths may, like dominant sevenths, be resolved ornamentally (§ 387).

426. Secondary sevenths should be carefully distinguished from dominant sevenths. We pointed out that the dominant seventh consists of *root, major third, perfect fifth, and minor seventh.* This is never so in secondary sevenths; either *both third and seventh are minor*, as in the supertonic seventh; or *both are major*, as in the tonic seventh. Secondary sevenths do not decide the key, while dominant sevenths do (§ 388). Thus the following seventh may be either in the key of C (supertonic seventh), in F (submediant seventh), or in B♭ (mediant seventh).

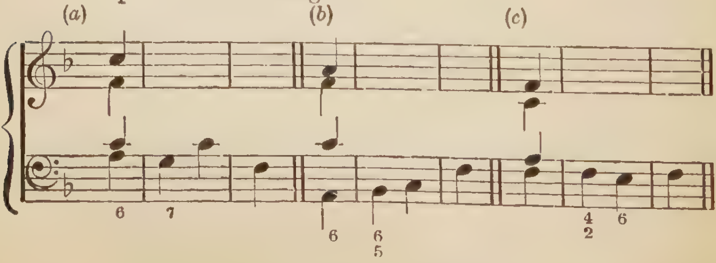
Fig. 212.



427. Note.—In early attempts at writing, musicians confined themselves to concords. In time discords were introduced, but at first these were either passing-notes (§ 527) or prepared discords. In those days even the dominant seventh was always prepared. In the beginning of the seventeenth century an Italian musician, Claudio Monteverde, was bold enough to use the dominant seventh *without preparation* for the first time, and, though this was strongly opposed by conservative musicians, men's ears by degrees got accustomed to the unprepared discord in the case of the dominant seventh. In time the secondary sevenths came to be used without preparation, and now musicians do not hesitate to use any essential discord without preparation. But the student must remember that only he who knows how to prepare a discord is fit to use it unprepared, and therefore we strongly urge beginners to prepare all secondary sevenths until they are sufficiently advanced to exercise their own judgment. The same applies to resolutions. Many other forms of resolution than those in § 416 are used by the great masters, but this is much too wide a subject to be entered upon here.

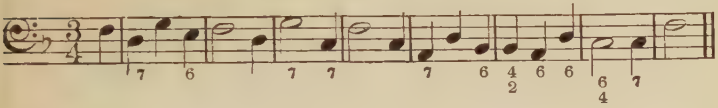
Exercises.

1. Complete the following:—

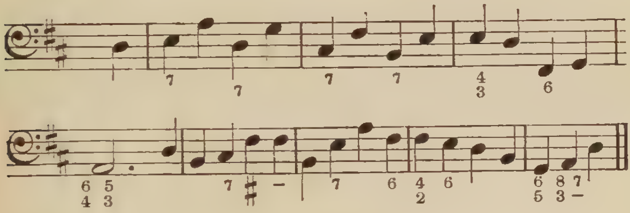


2. Add three upper parts.

(1)

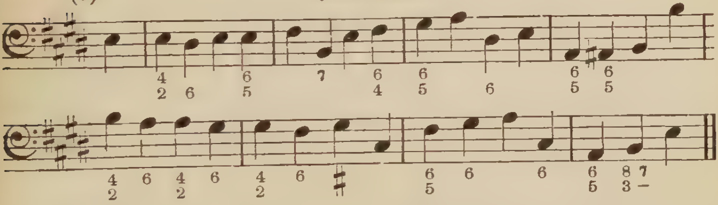


(2)

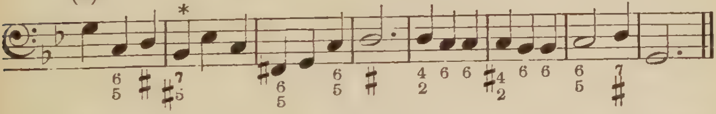


(3)

Hymn Tune.

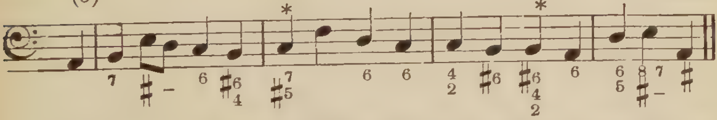


(4)



(5)

(§ 365)



* These chords are formed by adding a third above the **mediant triad** which in the **minor** has an *augmented fifth.* This interval is dissonant and must be prepared (as well as the seventh), and resolved by rising a second. This augmented triad on the mediant of minor keys (without the seventh) can be used in its root position and first inversion if the dissonant fifth is prepared and the chord resolved on the submediant common chord. Another way of looking at this chord is shown on p. 238 n.

CHAPTER XXXV.

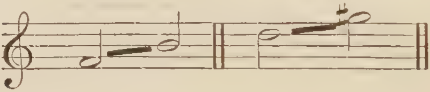
RECAPITULATION OF THE LAWS OF PART-WRITING.

428. **Melodic Progression.** — Each part should proceed smoothly, with as little *leaping* as possible.

It is always best to move by step (*i.e.* in *conjunct movement*). When this is not possible it is better for the parts to leap by the smaller intervals (third and fourth). There is no objection to the leap of an eighth, but as a rule this is only possible in the bass or treble. The leap of a major seventh and intervals beyond the octave are absolutely forbidden (*v.* also § 711).

429. No part should proceed by an *augmented interval.*

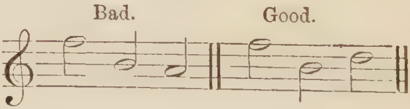
Fig. 213.



430. Exceptions to this are allowed (*a*) when the notes forming the augmented interval form part of the same harmony (§ 553); (*b*) in a *sequence* (§ 464); (*c*) in the notes of the harmonic minor scale used as passing notes (§ 528).

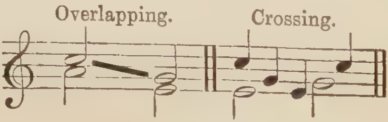
431. If any part proceeds by a *diminished interval* the part should return at once to some note within that diminished interval.

Fig. 214.



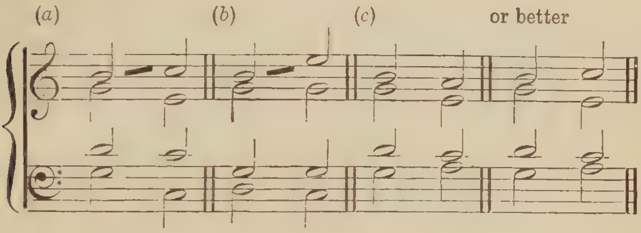
432. The parts must not overlap or cross.

Fig. 215.



433. The **leading-note** must never be doubled (but see § 469). When it occurs in a perfect cadence it *must* rise to the tonic (*a*). When it is followed by a tonic chord (but not in a perfect cadence) it must rise, but not necessarily to the tonic (*b*). In all other cases it may rise or fall, but it should rise whenever possible (*c*).

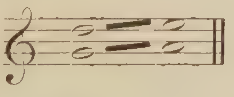
FIG. 216.



HARMONIC PROGRESSION.

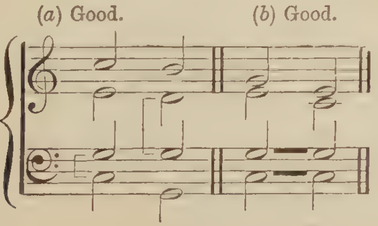
434. **Consecutive fifths.**—No two parts may *move* in *perfect fifths* with each other.

FIG. 217.



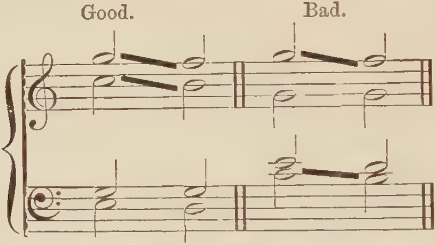
435. *Perfect fifths* in consecutive chords are not forbidden when they do not occur between the same parts (*a*) ; nor are the fifths objectionable between the same parts if both parts are stationary (*b*).

FIG. 218.



436. When one fifth is *diminished*, consecutive fifths are allowed between the inner parts, or between the upper and one of the inner parts. This is always most satisfactory when the perfect fifth comes first. Between the extreme parts consecutive fifths had better be avoided, even when one is diminished.

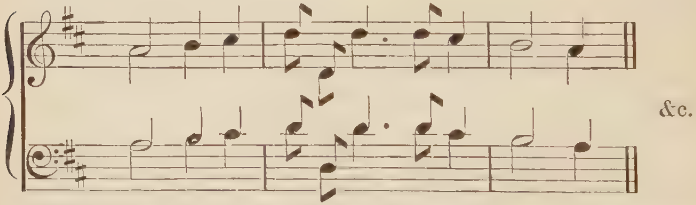
FIG. 219.



437. No two parts may move in octaves or in unison with each other (§ 296).

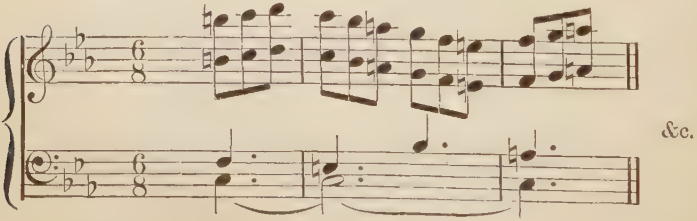
438. This rule does not apply when all the parts are singing or playing a whole passage in unison or in octaves. In the following example from Handel's *Hallelujah* chorus (twelfth bar) the whole band and chorus are singing and playing the same melody, and there is no harmony.

FIG. 220.



439. Nor does it apply when the same melody is played in two or more parts, as in the following example from Beethoven (P.F. Sonata IV.) where the melody is in octaves, the music being only in three parts.

FIG. 221.



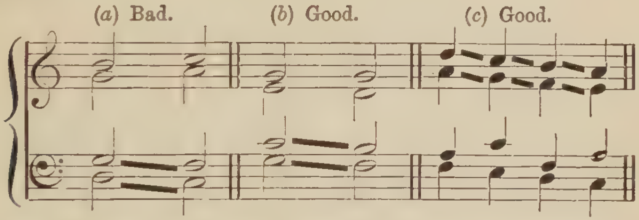
440. **Hidden consecutives.**—The *extreme* parts may not proceed *by similar motion* to a **perfect fifth, perfect octave,** or **unison** (§ 314).

441. **Except** (*a*) when the *tonic* chord moves to the *dominant* chord or *vice versa*; or when the *tonic* chord moves to the *subdominant* chord or *vice versa*, provided in both cases that the upper part moves only by the step of a second (§ 316).

(*b*) When a chord moves from a first inversion to the root position of the same chord (§ 333).

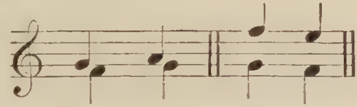
442. No part may proceed in *fourths with the bass*, unless the second fourth is an augmented fourth. Consecutive perfect fourths between upper parts are unobjectionable (but see § 651).

FIG. 222.



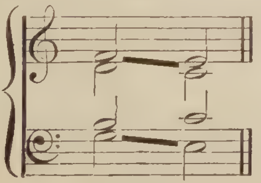
443. No two parts may move in seconds or sevenths with each other.

FIG. 223.



444. No note may proceed by *similar motion* to the note (or its octave) on which a dissonant note resolves (§ 379).

FIG. 224. Bad.

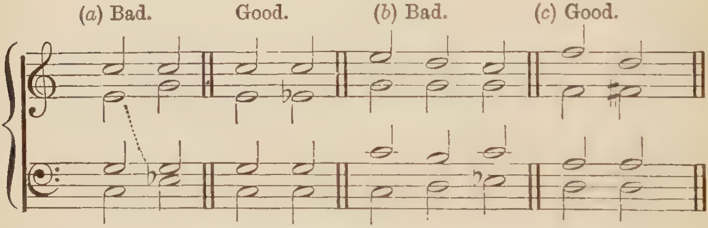


445. False relation.—When a chord containing a *natural* note is followed by a chord containing the same note *sharpened* or *flattened* (or *vice versa*), the altered note must appear in the same part or voice. Non-observance of this rule produces *false relation* (fig. 225 *a*).

The bad effect is generally felt, even when the two chords in *false relation* are separated by an intervening chord (*b*).

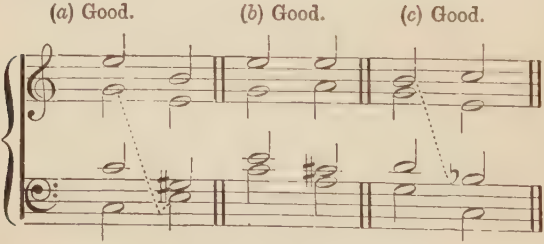
446. When the altered note occurs in two parts (*i.e.* is doubled) in the first chord, it must be only altered in *one* part, or consecutive octaves will result.

FIG. 225.



447. **Exceptions.** *False relation* is not produced when the third of the first chord is (*a*) the root or (*b*) the fifth of the second chord; (*c*) nor when the altered note forms part of a fundamental discord (§ 390).

FIG. 226.

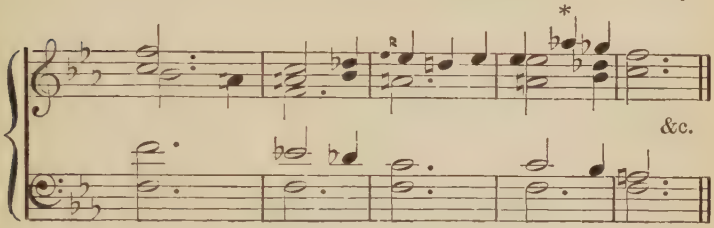


448. Many examples of *false relation* which do not come under any of the above exceptions will be found in good composers. The question can only be decided by the good taste of the writer, but the student should strictly confine himself to the rules laid down above.

449. Passing notes and auxiliary notes (§ 527) do not produce false relation, and in this way the interval of a *diminished octave* is not infrequently used.

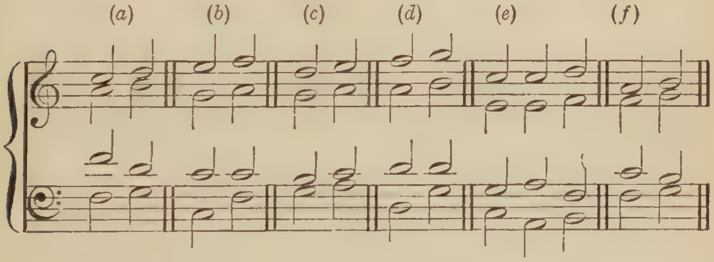
FIG. 227.

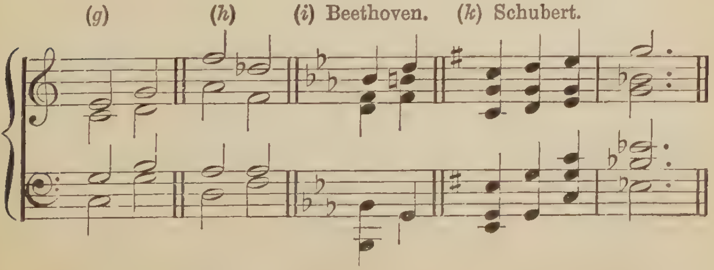
SCHUMANN, E♭ Symphony.



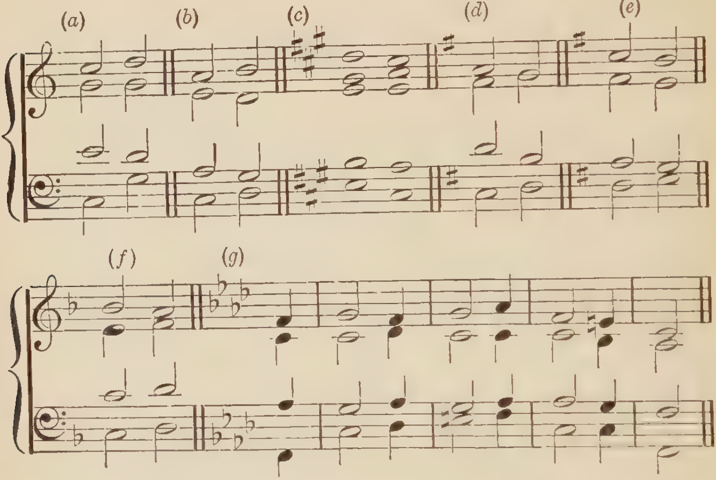
EXERCISES.

1. Point out the errors in the following. If in any case the apparent error is allowed, state the rule which says so.





2. Point out the errors (if any) in the following, and correct them.

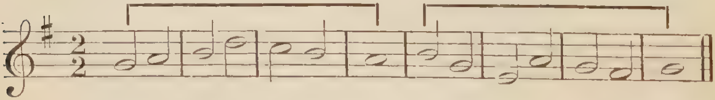


CHAPTER XXXVI.

CADENCES.

450. All good melodies are constructed on some definite plan. For example, the following consists of two exactly similar halves, each half being four bars in length.

Fig. 228.



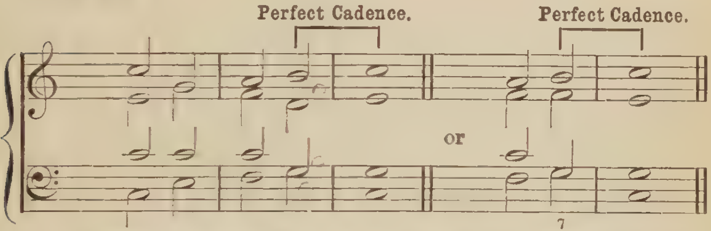
451. We might call the whole eight bars a musical sentence and each part a phrase. Thus the melody in fig. 228 consists of two *phrases* of four bars each. It must not be imagined that all melodies consist of two phrases or that all phrases are four bars long. What we wish to point out is that melodies can be divided into phrases which are related to each other. This division of music into phrases &c. constitutes *rhythm*, and as that will be fully dealt with in Part III. it may be left for the present.

452. Each phrase into which a melody is divided ends with an appropriate cadence, and we may now proceed to the study of cadences.

453. A **cadence** or *close* means the ending of a melody or musical phrase. The chief cadences are **Perfect, Plagal, Imperfect,** and **Interrupted.**

454. A **perfect cadence** or **full close** consists of the *dominant common chord*[1] followed by the *tonic common chord*, both chords being in their root position.

Fig. 229.

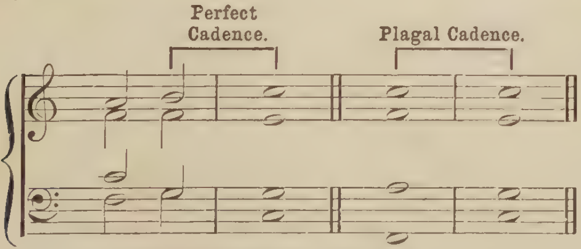


455. The **perfect cadence** is used at the end of a composition, or at the end of an important section. In most cases it is arranged (as in fig. 229) so that the *tonic chord* occurs on the first beat of the bar, the *dominant* chord being on the last beat of the previous bar. There are, however, many exceptions to this.

456. The **plagal cadence** consists of the *tonic common chord* preceded by the *subdominant common chord.*

457. In modern music the *plagal cadence* is only (as a rule) used at the end of a composition and *after* a perfect cadence. A very good example is seen at the end of the *Hallelujah* chorus in Handel's 'Messiah.' It has a restful and even solemn effect, and on this account it is much used in church music. The *Amen* at the end of hymn tunes is usually this cadence.

Fig. 230.



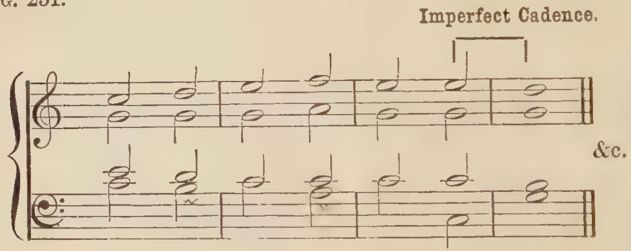
---

[1] Instead of the dominant common chord we often have the dominant seventh.

458. The term *perfect cadence* is applied both to the perfect and plagal cadences. To distinguish between the two, the perfect cadence consisting of *dominant* and *tonic* chords is called **authentic**; the cadence consisting of *subdominant* and *tonic* is called **plagal.**

459. The **imperfect cadence** or *half-close* ends on the *dominant common chord.* The chord before the dominant may be any suitable chord, but most frequently it is the *tonic common chord.*

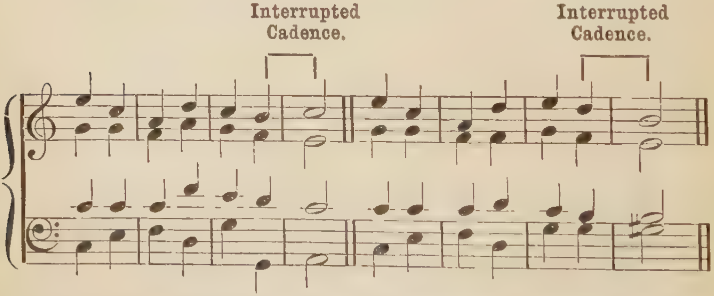
Fig. 231.



460. When the *dominant chord* in a cadence is followed, *not* by the tonic chord, but by some other chord, we have an **interrupted cadence.**

The commonest *interrupted cadence* is the *dominant chord*, followed by the *submediant common chord* in its root position.

Fig. 232.



461. The *imperfect* and *interrupted* cadences cannot be used at the end of a composition or even at the end of an important section, for if we play figs. 231–2, we shall see that these cadences do not suggest the end of a complete musical idea. They rather indicate a sort of short pause before

the completion of the idea. We saw in § 451 that a melody can be divided into *phrases*, each phrase having its own cadence. The *perfect cadence* is used for the end of a melody, *i.e.* for the last cadence; the *imperfect* and *interrupted* cadences are used for the cadences in the middle of a melody (*v.* § 694).

FIG. 233.

Example of middle cadence (*imperfect*).

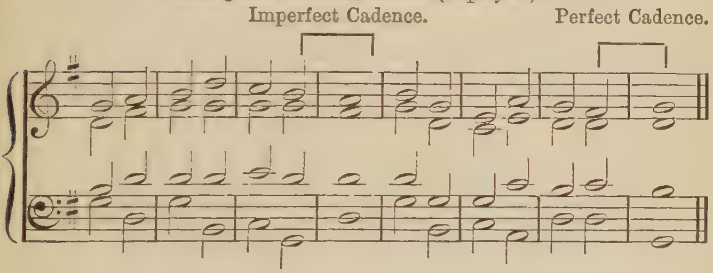
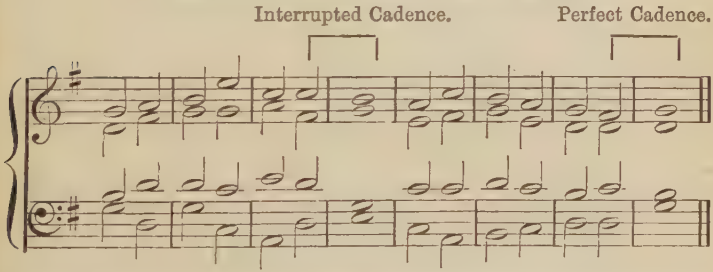


FIG. 234.

Example of middle cadence (*interrupted*).



462. From the way in which cadences are used to mark off the divisions of a melody or musical sentence, they are sometimes compared to the punctuation marks used in writing. Thus the *perfect* cadence is compared to a full-stop; the *interrupted* and *imperfect* cadences resemble in their use the comma and the semicolon.

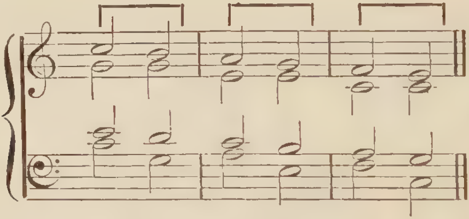
463. If either of the chords used in a perfect cadence is in its inverted form, the cadence is called an *inverted cadence*. An inverted cadence can only occur as a middle cadence.

CHAPTER XXXVII.

SEQUENCES.

464. A sequence is the repetition of a progression of melody or harmony on other notes of the scale. In every repetition each part moves by the same degree as in the original pattern progression, and the repeated *groups* follow each other at regular intervals of pitch.

FIG. 235.



In fig. 235 we have a *sequence* consisting of two chords repeated three times. In each repetition the *treble* descends a second; the *alto* repeats a note; the *tenor* descends a second; the *bass* descends a fourth. Further, each note in the second group is a third below the corresponding note in the first group, and so on for each succeeding group.

A *sequence* may consist of the repetition of two or more notes or chords. The repetitions may be either on higher or lower notes of the scale.

465. When all the notes in a sequence are according to the key in which it is written, it is called a **tonal sequence**,[1] as in fig. 235.

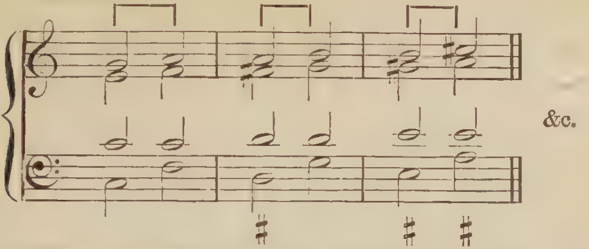
In a *tonal sequence* the intervals in each repetition are like the original in name but not always in *quality*. Thus (fig. 235) in the pattern both chords are *major*, but in the first repetition both are *minor*, while in the next both are major.

466. When every repetition is exactly like the original pattern in quality as well as in name, we have a **real sequence**. In a real sequence the key changes at each repetition.

---

[1] Sometimes called a *diatonic* sequence.

FIG. 236.



In fig. 236 every chord throughout is *major* as in the pattern. This is a *real sequence.*

A *real* sequence is much rarer than a *tonal.*

467. When a given *bass* or *melody* progresses sequentially the added parts should be also arranged in sequence.

468. Frequently the following out of a *sequence* will necessitate the breaking of some of the laws of progression. This is allowed, the interest of the sequence justifying what, taken by itself, would be objectionable.

It must be distinctly understood that these exceptions are only allowed in one of the repetitions of a sequence, and must on no account occur in the original progression.

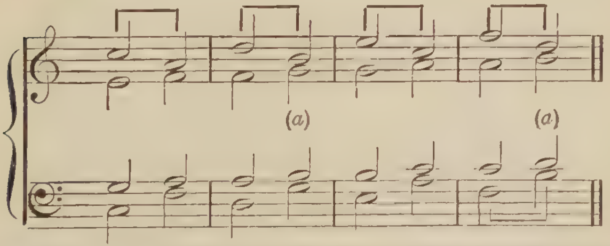
469. The chief points *exceptionally* allowed in *sequences* are:

(1) The *leading-note* may be doubled (§ 433).

(2) The *leap* by an *augmented interval* in any part (§ 429).

(3) The use of the diminished triad and triad on the mediant (§ 312).

FIG. 237.



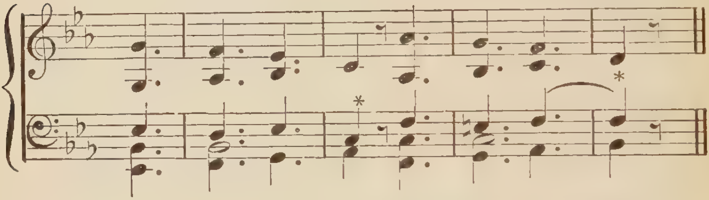
In fig. 237 at (*a*) the *leading-note* is *doubled.* In the last repetition the bass leaps an augmented fourth (F–B). The last chord is the *diminished triad.*

470. In sequences *second inversions* of common chords must never be used. The student will see the reason for this rule in § 338.

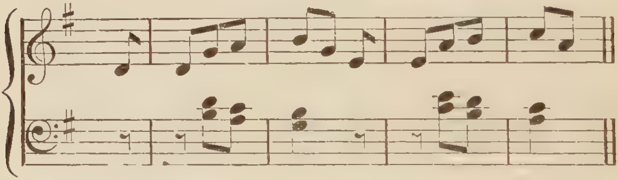
EXERCISES.

1. How should you describe the following passages? What irregularity is there at *, and what do you suppose is the probable reason of it?

(*a*) BEETHOVEN, Op. 7.



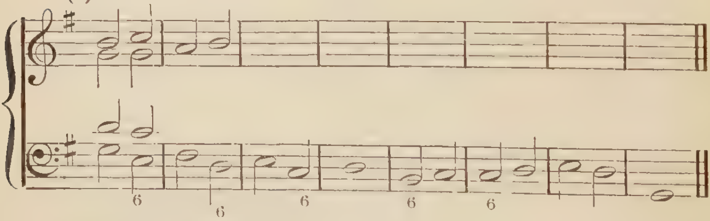
(*b*) BEETHOVEN, Op. 49, No. 1.



2. Why are second inversions of common chords forbidden in sequences?

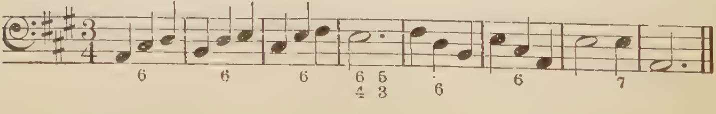
3. Complete the following:—

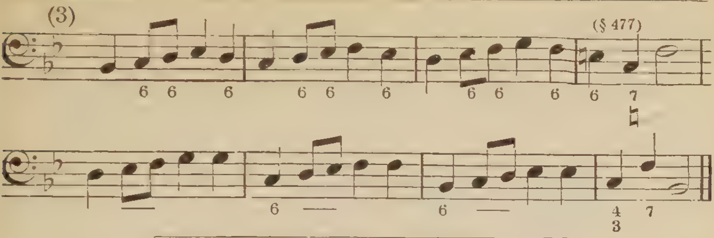
(1)



Add three upper parts to the following:—

(2)





CHAPTER XXXVIII.

MODULATION.

471. Few pieces of music, however short, remain in the same key throughout. The changing from one key to another is called **modulation.**[1]

Modulation is simplest when the key into which we modulate is related to the old one, and it will now be necessary to see what keys are related to each other.

472. Two keys are said to be **related** when they contain all, or nearly all, the same notes (§ 127).

Thus the scales of C and G major have all their notes alike except one, F♯. Similarly the scales of C and F have all their notes alike except B♭. We say then that C is related to G and to F.

Again, we have shown (§ 128) that every major scale has a *relative minor* which begins on a note a minor third below the old tonic. Then C *major* is related to A *minor*; G *major* to E *minor*; F *major* to D *minor*. And as C is related to G major and F major, C must be related through these to E minor and D minor. We may show this in a table thus:

C major is related to

F major		G major
D minor	A minor	E minor

473. The **related**[2] **keys to a major key**[3] are the *major keys* of the *dominant* and *subdominant*, and the *minor keys* of the *supertonic*, *mediant*, and *submediant*.

---

[1] Sometimes called *transition*, though some writers only apply this term to modulation to unrelated keys (§ 476).

[2] Called also *attendant* keys and *auxiliary* keys.

[3] If we write a triad on each note of a major scale except the leading-note, we have the *tonic chord* of all the keys related to that scale. Thus in C: D minor, E minor, F major, G major, A minor.

474. Proceeding as in § 472 we shall see that the **related keys to a minor key** are: the *relative major*, the *minor keys* of the *dominant* and *subdominant* with their *relative majors*. Thus:—

C minor is related to

F minor		G minor
A♭ major	E♭ major	B♭ major

475. It is worth remembering that related keys are those having the same key-signature or one sharp or flat more or less.

476. Modulation to a related key is called **natural modulation.**

Modulation to an unrelated key is called **extraneous modulation** (§ 666).

When the modulation is brought about by enharmonically changing one or more notes, it is called **enharmonic modulation** (§ 566).

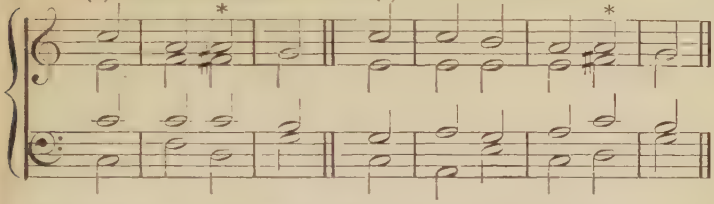
NATURAL MODULATION.

477. Modulation to a related key is brought about by introducing a chord containing a note characteristic of the new key. This chord is usually a **dominant chord** (especially the dominant common chord and the dominant seventh **of the new key**). This new dominant should always be followed by other chords to establish the new key.

478. When the modulating chord is introduced immediately after a chord which is characteristic of the old key, the modulation is said to be **sudden.**

479. When the modulating chord is preceded by chords which belong equally to the old and new keys, the modulation is said to be **gradual.**

FIG. 238.



(*a*) C to G. *Sudden.* (*b*) C to G. *Gradual.*

The modulating chord is marked *. At (*a*) the preceding chord could here only be in C, since the F is natural; at (*b*) the three chords preceding the modulating chord could be in C or G.

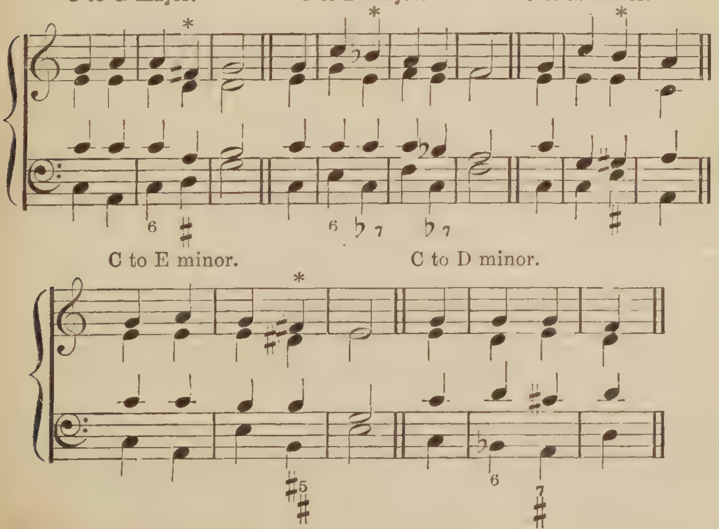
480. Such chords, which may be either in the key we are leaving or in that to which we are modulating, are called **ambiguous chords.**

481. Unless some special effect is intended, gradual modulation is always to be preferred.

482. The most frequent modulation for a piece beginning in a **major key** is to the *dominant*; for one beginning in a **minor key** to the *relative major.*

EXAMPLES OF MODULATION TO RELATED KEYS.

FIG. 239.



C to G major. C to F major. C to A minor.

C to E minor. C to D minor.

483. In modulating from a major key to the minor of the supertonic as in the last example, it is always best to introduce the minor sixth of the new key (in this case B♭) before the chord containing the leading-note.

484. We have noticed that the dominant seventh is exactly the same in tonic major and minor (§ 410). A modulation from *tonic major* to *tonic minor* by means of the dominant seventh is very common. An example will be found in Beethoven's P. F. Sonata, No. 16, beginning at bar 99.

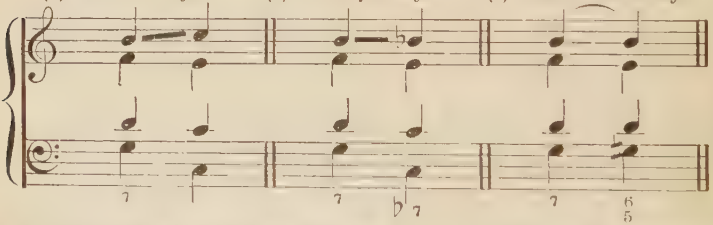
485. As the **dominant seventh** is so much used in modulation it will be well to give some further examples of its resolution. In §§ 381–4 we have shown the usual resolutions, to which must be added the following:

486. The **third** resolves by *rising* a second,[1] *falling* a chromatic semitone, or *remaining* to be a note of the next chord.

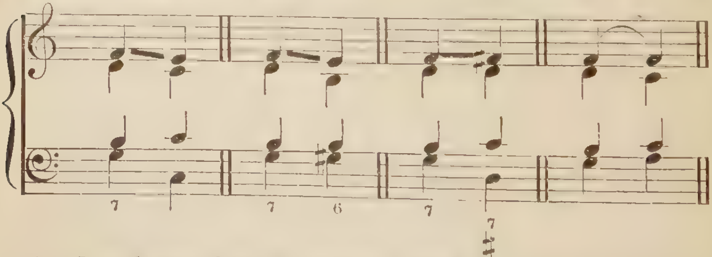
487. The **seventh** may *fall* a second, *rise* a chromatic semitone, or *remain* to be a note of the next chord.

The other notes (*root* and *fifth*) of this chord are free in their progression (§ 380) provided they break no law of part-writing.

FIG. 240.



(*a*) Third *rising*. (*b*) Third *falling*. (*c*) Third *remaining*.



(*d*) Seventh *falling*. (*e*) Seventh *rising*. (*f*) Seventh *remaining*.

488. In each case where the dominant seventh is resolved exceptionally it leaves us on a chord the resolution of which will produce modulation, *e.g.* in fig. 240 (*b*) goes to F, (*c*) to A minor, &c.

---

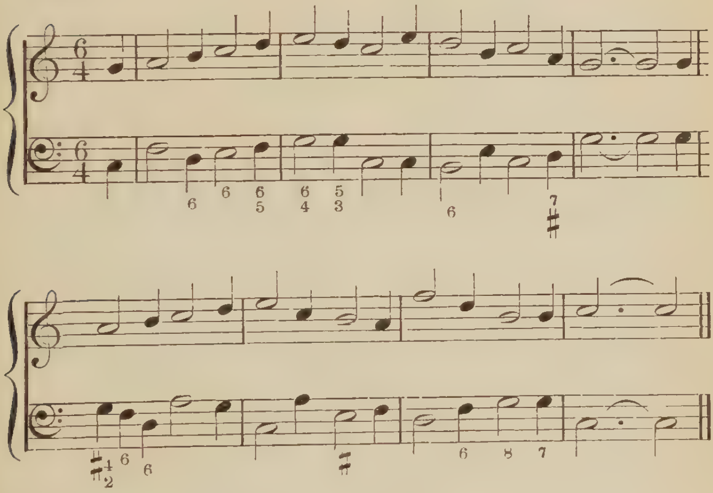
[1] Examples of its rising a major second will be found in § 607.

EXERCISES.

NOTE.—The chord which produces the modulation *belongs to the new key*, and when this chord is a discord its constituent notes, in resolving, must be considered with reference to that new key.

I. Add two inner parts to the following :

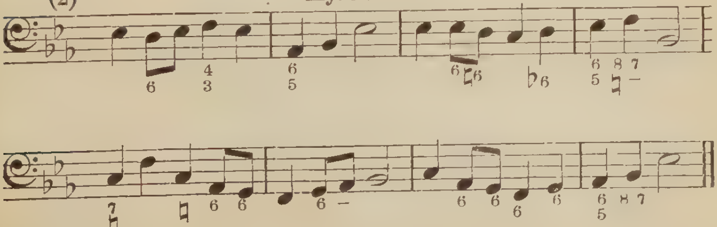
(1)



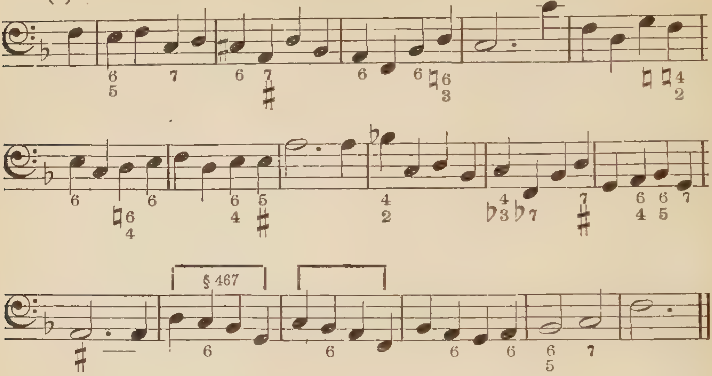
Add three upper parts to the following :

(2)

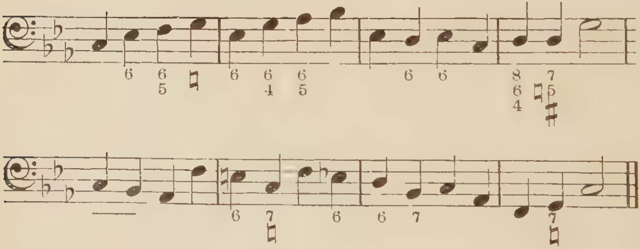
Hymn Tune.



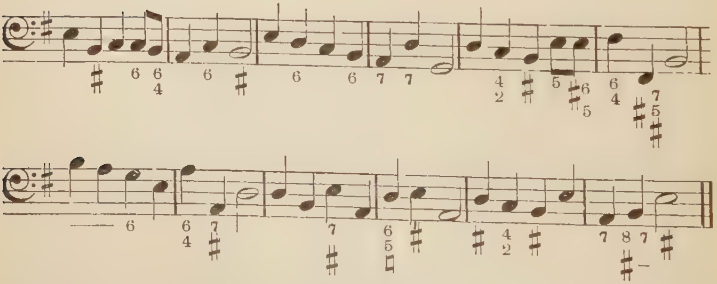
(3)



(4)



(5)

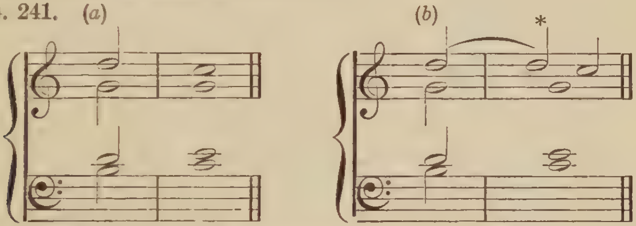


CHAPTER XXXIX.

SUSPENSIONS.

489. If we compare (*a*) and (*b*), fig. 241, we see that they are exactly alike but for one thing: in (*a*) the treble D goes directly to C in the next chord; in (*b*) the treble D, instead of going at once to C when the chord changes, is **held over**, proceeding later to C. This note (D) is said to be **suspended**, and it is called a **suspension.**

FIG. 241.



490. When a note of one chord is held over the next chord, of which it forms no part, it is called a **suspension.**

491. Since a suspended note is no part of the chord over which it is held, it is evidently *dissonant.* We have already had discords where the dissonant note is a part of the chord in which it occurs. Suspensions are called *unessential discords* because they are no part of the chord in which they occur.

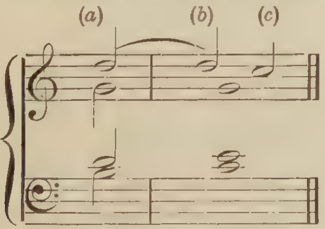
492. A **suspension** must go through three processes:

(*a*) It must be **prepared,** *i.e.* sounded as a part of a chord.

(*b*) It must be **suspended,** *i.e.* held over another chord of which it is no part.

(*c*) It must be **resolved** by proceeding to one of the notes of the chord over which it is suspended.

FIG. 242.



At (*a*) D is part of the chord; this is the *preparation.*

At (*b*) D is *not* part of the chord; it is simply *held over* or *suspended.*

At (*c*) the D proceeds to *C*, which is part of the chord; this is the *resolution.*

493. In resolving a suspension the suspended note must move by step of a second to a note of the chord on which it resolves.

Most suspensions resolve by *falling* a second, but in some cases they *rise* a second (§ 516).

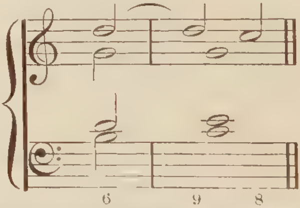
494. As a matter of principle any note may be suspended provided that it can be resolved by moving a second, but the following are the chief suspensions used. The ninth; the fourth; the fifth on the third and seventh degrees of the major or minor scale, and the leading-note resolving on the octave with the tonic common chord.

SECTION I.—The suspended ninth.

495. In this case the note above the octave of the bass of a common chord is suspended, and then resolved on the octave.

Thus D is the note next above the octave of the root C (*i.e.* the ninth from that root), and it resolves on the eighth.

FIG. 243.



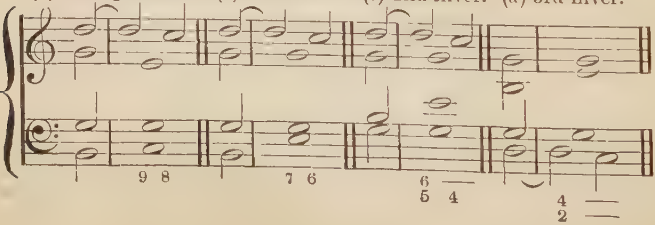
496. It is important to notice that after the suspended ninth is resolved we have an ordinary common chord. The suspended ninth, then, is merely a common chord with the note above the octave suspended and resolved, and this common chord, *together with the suspended note*, can be used in its inversions just like any other common chord.

The suspended ninth can be taken in the bass, and so we have three inversions which are shown in fig. 244.

THE SUSPENDED NINTH AND ITS INVERSIONS.

FIG. 244.

(*a*) Root position. (*b*) 1st inver. (*c*) 2nd inver. (*d*) 3rd inver.



497. It will readily be seen that in each of the above cases the bar containing the suspension has exactly the same common chord but in different inversions. In each case the same note (D) is suspended, and in each case it is resolved on the same note C, the root of the chord.

498. **Figuring.**—As in all other cases, we must count from the **bass-note.** The **root position** is figured 9 8.

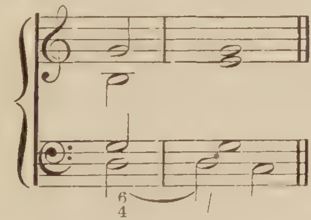
In the **first inversion** the suspended note is now a seventh from the bass, and it resolves on the sixth; it is figured, therefore, 7 6, *i.e.* it is a chord of the sixth, with the sixth held over by a seventh.

In the **second inversion** the suspended note is a fifth from the bass, and it resolves on the fourth. It is figured $\genfrac{}{}{0pt}{}{6\ -}{5\ 4}$, *i.e.* it is a $\genfrac{}{}{0pt}{}{6}{4}$ with the fourth held over by a fifth.

In the **third inversion** the suspended note is in the bass, and as it resolves on the root the other notes of the common chord will be the second and fourth above the suspension. It is figured $\genfrac{}{}{0pt}{}{4\ -}{2\ -}$, or if the root is present in the upper part $\begin{smallmatrix}7\ -\\4\ -\\2\ -\end{smallmatrix}$.

499. Note.—Where a suspension occurs in the bass it is sometimes indicated by an oblique line /. This sign means that the bass is to be accompanied by the notes of the chord belonging to the following note.

Fig. 245.



General Rules for Suspensions.

For examples see fig. 244.

500. (*a*) The suspension must be prepared in the same voice as that in which it is suspended.

(*b*) Suspensions must occur on the accented part of the bar.

(*c*) The note *preparing*[1] the suspension should not be shorter than the *suspended* note.

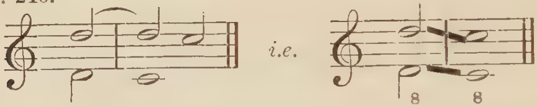
---

[1] This rule is often disregarded when the suspended note is sounded again instead of being tied.

(*d*) No part may move by *similar motion* to the note (or its octave) on which the suspension resolves (§ 379).

(*e*) No suspension is allowed in any progression which, if the suspension were absent, would produce forbidden consecutives.

FIG. 246.

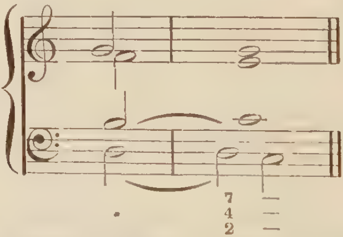


It is clear then that suspended ninths cannot be prepared by eighths, nor sixths by fifths.

(*f*) The note (or its octave) on which a suspension resolves *must not be sounded at the same time as the suspended note*, except the ninth with the root in the bass (fig. 244 (*a*)).

Another exception is the ninth with the root in an upper part, *provided that the root is approached by step of a second*, and is at least an octave from the resolution of the suspension (fig. 247). This should, however, be used with great discrimination (see also § 513).

FIG. 247.



(*g*) It follows from (*f*) that a second cannot resolve on a unison.

501. The suspended ninth in **major keys.**

The **root position** can occur on any note that bears a common chord (§ 312).

The **first inversion** can occur on every note, because every note has a first inversion (§ 326).

The **second inversion** can only occur on those notes of the scale which have second inversions, viz. *dominant*, *tonic*, and *supertonic* (§ 338).

The **third inversion**, as it resolves on a common chord, can be taken on any note when the note below (*i.e.* that on which it resolves) bears a common chord.

502. The suspended ninth in **minor keys.**

There are fewer common chords in minor keys, and the augmented interval between the sixth and seventh notes interferes in some cases with resolution. The result is fewer suspensions can be used.

The **root position** can only occur on *tonic*, *dominant*, and *subdominant*.

The **first inversion** can occur on every note except the *tonic*.

The **second inversion** only on *dominant*, *tonic*, and *supertonic*.

The **third inversion** only on *supertonic*, *submediant*, and *dominant*, *i.e.* on the notes above those bearing common chords.

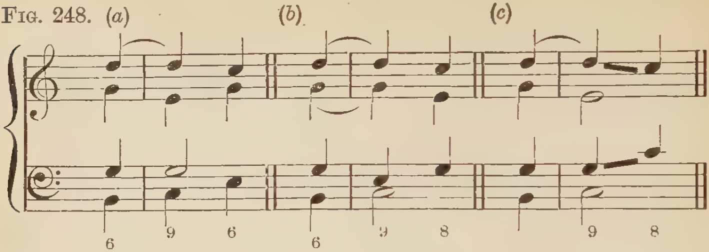
503. **Caution.**—There is a certain resemblance between the figuring of suspensions and of the chords of the seventh described in chapters xxxi.–xxxiv., but the student will easily avoid confounding these if he bears in mind the resolutions. Thus 7 6 shows that the seventh is resolved on the sixth of the same bass, and this is never the case with the sevenths referred to. Again, $\substack{4\,-\\2\,-}$ suggests the last inversion of chords of the seventh (§ 402), but that inversion resolves on a $\substack{6\\3}$, and, therefore, it is plain that $\substack{4\,-\\2\,-}$ is a suspension.

504. In adding parts to a figured bass with suspensions, it must be remembered that when the suspension is resolved we have a common chord or one of its inversions. Thus the suspension must be accompanied by the notes belonging to the chord of resolution as shown by the second figure, thus 9 8 is accompanied by 5 and 3; 7 6 by 3 because the 6 means $\substack{6\\3}$, &c. Remember, too, that while 7 alone means a chord of the seventh and implies $\substack{7\\5\\3}$, 7 6 means a $\substack{6\\3}$ and *must not* be accompanied by the fifth.

505. Suspensions may occur in any voice, but in working exercises it is often most convenient to place them in the treble.

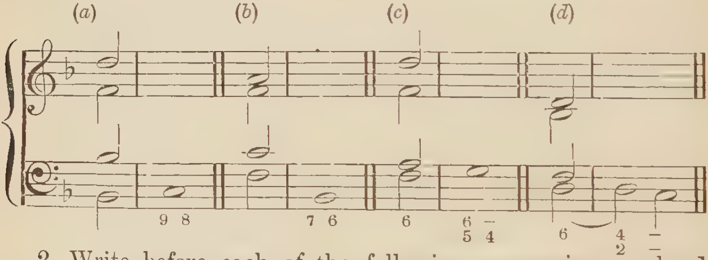
506. A suspension **must** resolve on the chord over which it is suspended, but when a 9 8 is resolved, the bass may at the same time move to the position of a first inversion as at (*a*) fig. 248. In any suspension *any* part may move to another note of the chord when the suspension resolves (*b*), or even to the note or the octave of the note on which it resolves, *provided in this latter case that it moves in contrary direction to the resolution* (*c*).

FIG. 248.

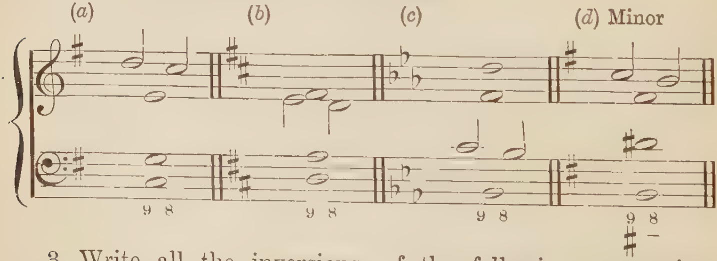


EXERCISES ON THE SUSPENDED NINTH.

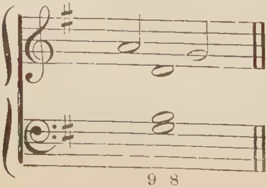
1. Fill in the following examples of suspensions according to the figuring:



2. Write before each of the following suspensions a chord which will suitably prepare the suspension:



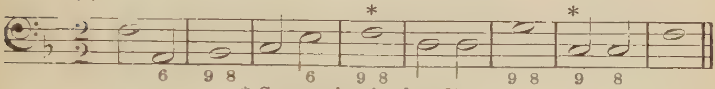
3. Write all the inversions of the following suspension, properly preparing the dissonant note in each case:



4. Write with suitable preparation the following suspensions in the key of D minor:—(*a*) the suspended ninth on the subdominant; (*b*) the first inversion[1] of the suspended ninth on the tonic; (*c*) the second inversion of the suspended ninth on the dominant; (*d*) the last inversion of the suspended ninth on the tonic.

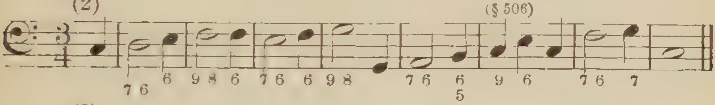
5. Write three upper parts to the following F. B.:

(1)

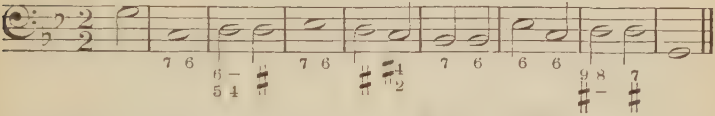


* Suspension in the *alto*.

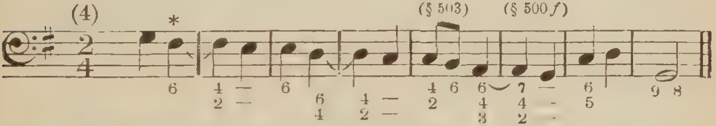
(2)



(3)



(4)

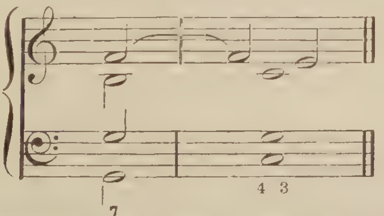


* The leading-note in suspension is allowed to descend.

Section II. **The Suspended Fourth.**

507. The **suspended fourth** resolves by falling to the third.

Fig. 249.



---

[1] The simplest way of doing these is to first write the *root position*, and then from that get the inversion required.

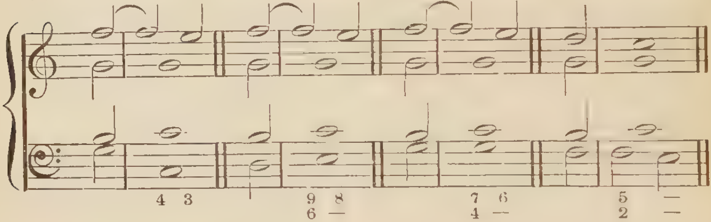
508. When the fourth falls to its resolution we have a common chord. The suspension is then merely a common chord with the *fourth* held over and then resolved.

As in the case of the suspended ninth, this common chord, together with the suspended note, can be inverted, as shown below.

THE SUSPENDED FOURTH AND ITS INVERSIONS.

FIG. 250.

(*a*) Root position. (*b*) 1st inversion. (*c*) 2nd inversion. (*d*) 3rd invers.



In each of these cases the suspended note (F) is the same, and the chords formed after resolution are simply the different inversions of the same common chord.

509. The **suspended fourth** in its root position is **figured** 4 3 or sometimes $^{5}_{4}\,^{-}_{3}$, where the 5 merely means the fifth of the common chord.

510. The **first inversion** of the 4 3 has the third in the bass, and since the fourth resolves on the third the suspended note must be a ninth above the bass-note. As it is a *first inversion* its figuring would be 6, but the ninth is suspended and resolved on the eighth, and so the **figuring** is $^{9}_{6}\,^{8}_{-}$ (fig. 250 (*b*)).

This suspension can be used with any first inversion except the first inversion of the dominant common chord, *i.e.* on the leading-note, because that would necessitate doubling the leading-note.

This inversion is another exception to the rule given in 500 (*f*), and in using it two points must be kept in mind:—

(*a*) The ninth cannot be approached by similar motion.

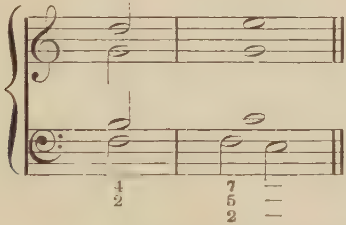
(*b*) The **bass should be approached by step of a second.**

511. The **second inversion** of the 4 3 has the fifth in the bass, and can only be used on those notes of the scale which can have second inversions. It is **figured** $^{7\,6}_{4\,-}$ and when the resolution is complete we get a $^{6}_{4}$ (fig. 250 (*c*)).

512. The **third inversion** of the 4 3 has the fourth in the bass, resolving on the third. The resulting chord is a chord of the sixth, and so this inversion can be used on the note above any note bearing a chord of the sixth. The **figuring** is $^{5\,-}_{2\,-}$ (fig. 250 (*d*)).

513. In the third inversion the third *can* be sounded in an upper part, but the student is advised not to avail himself of this exception to § 500 (*f*). If it is used care must be taken to follow the rules in § 500 (*f*) (*g*). This form with the figuring is shown below.

FIG. 251.



In working exercises on the 4 3 all the rules of suspensions (§§ 492-500) must, of course, be followed.

514. The suspended fourth in **major** keys.

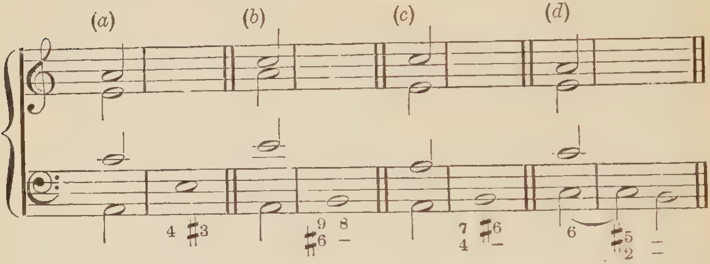
The root position occurs on any note bearing a common chord.
The first inversion on every note of the scale except the leading-note.
The second inversion on tonic, dominant, and supertonic.
The third inversion on every note.

515. The suspended fourth in **minor** keys.

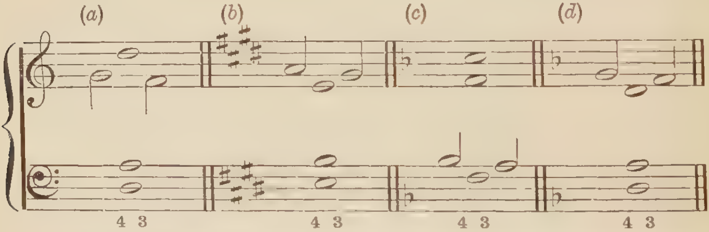
The root position on tonic, dominant, and submediant.
The first inversion on the first, second, third, fourth, and fifth degrees.
The second inversion on the supertonic and dominant.
The third inversion on the first, second, third, fourth, and fifth degrees.

EXERCISES.

1. Fill up the examples of suspensions in the key of A minor.



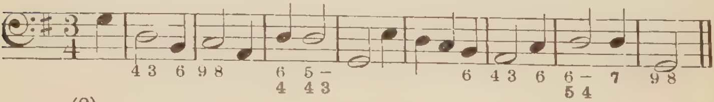
2. Write out each of the following suspensions with suitable preparation; then write (properly prepared) all the inversions of (*b*) that are available.



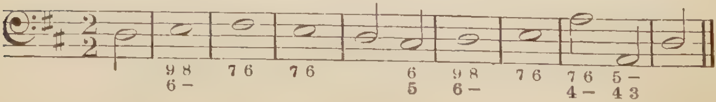
3. Write out with suitable preparation the following suspensions in A major:—(*a*) The suspended fourth on the dominant. (*b*) First inversion of the suspended fourth on the supertonic. (*c*) The second inversion of the suspended fourth on the tonic. (*d*) Last inversion of suspended fourth on the supertonic.

4. Fill in the following:—

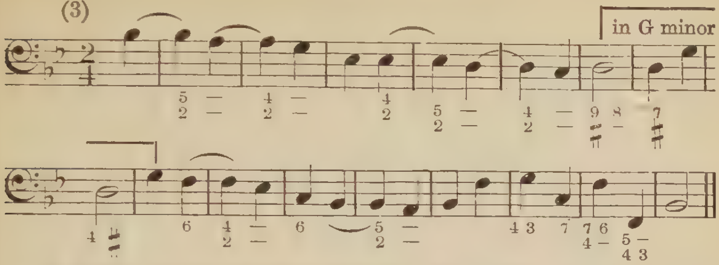
(1)



(2)



(3)



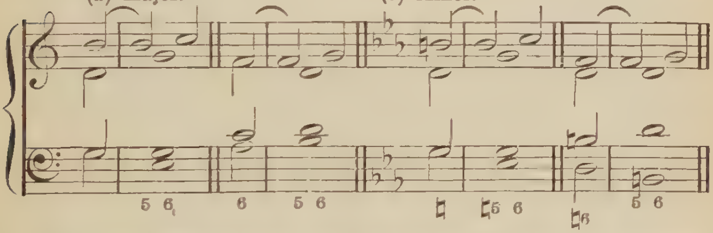
5. Show by an example why the suspension 4 3 cannot be taken on the fourth degree of the minor scale.

SECTION III. The 5 6, &c.

516. The **fifth** from the *third* and the *seventh* of major and minor keys may be suspended and resolved by *rising a second* to the *sixth* of the same bass-note.

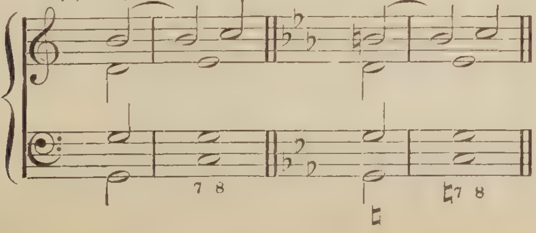
In each case the chord resulting from the resolution is a first inversion, and the **figuring** is 5 6.

FIG. 252.


(*a*) Major. (*b*) Minor.

517. The **leading-note** may be suspended over the common chord of the tonic, resolving by *rising a second* to the octave of the root. The **figuring** is 7 8.

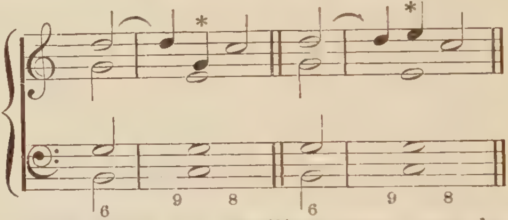
FIG. 253.


(*a*) Major. (*b*) Minor.

518. Suspensions which resolve by **rising** are called **retardations** by some authorities, but see § 545 in this connection.

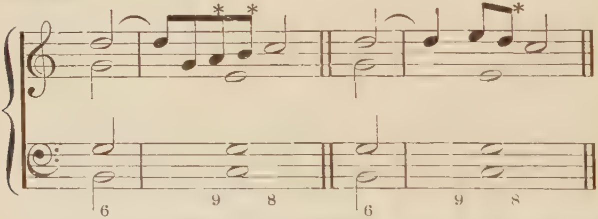
519. **Ornamental resolution.** Like the dominant seventh (§ 387) any suspension may, before resolving, leap or go by step of a second to any note of the same chord, provided that it returns to its proper resolution before the chord changes.

FIG. 254.



520. *Passing notes* and *auxiliary notes* may be used in ornamental resolutions (§§ 528, 539).

FIG. 255.



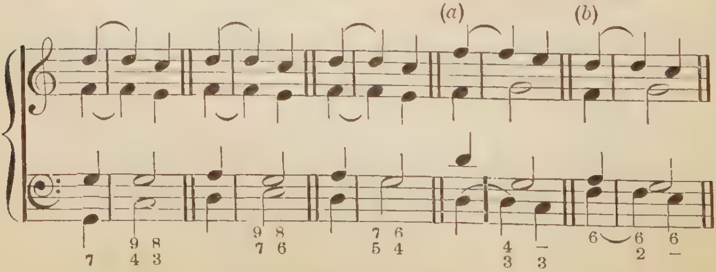
521. **Double and triple suspensions.** The ninth and fourth may be suspended together, either in the root position of the chord or in any of the inversions.

In all *double* or *triple suspensions* the treatment of each suspended note is just the same as if each suspension occurred separately.

THE SUSPENDED NINTH AND FOURTH.

FIG. 256.

Root position. 1st inversion. 2nd inversion. Last inversion.

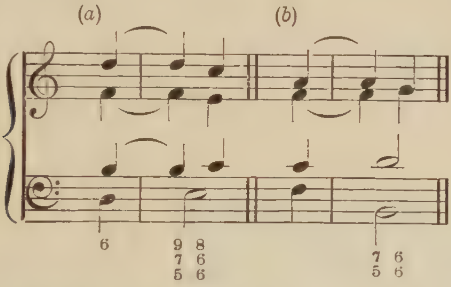


522. Note. There are two forms of the last inversion, (*a*) when the ninth is in the bass, (*b*) when the fourth is in the bass.

523. The fifth on the mediant may be suspended together with the first inversion of a fourth and ninth of the tonic (*a*).

The fifth on the leading-note may be suspended together with the first inversion of a suspended ninth (*b*).

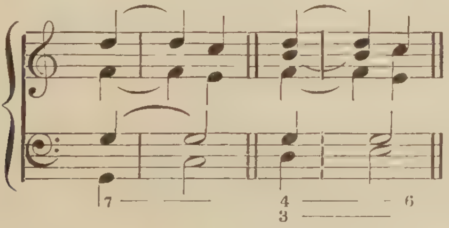
FIG. 257.



524. **The suspension of chords.**—The whole of a chord may be suspended over the following bass-note if the *root* of the second chord is a fourth above (or a fifth below) the *root* of the first. In resolving the suspended chord each dissonant note must move by step.

525. The **figuring** is shown by a line from the first to the second bass-note, and if the second chord is in its first inversion a 6 is added at the end of the line.

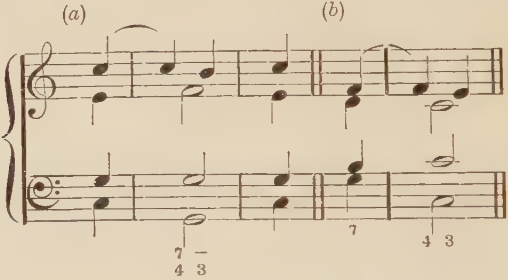
FIG. 258.



526. **Suspensions with the dominant seventh.**—The *third* of the dominant seventh is very frequently delayed by a sus-

pended fourth (*a*); when the dominant seventh resolves on the tonic chord, the resolution of the seventh is frequently delayed as a suspended fourth.

FIG. 259.

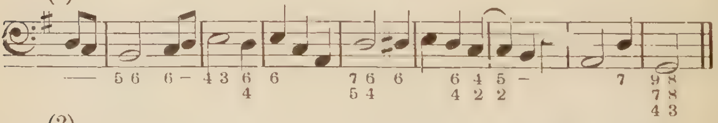


EXERCISES.

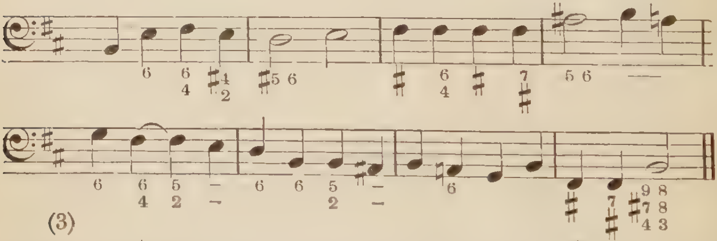
1. Add three upper parts to the following:

At the places marked * modulations occur, and as long as the modulation lasts the notes must all be considered in relation to the new key.

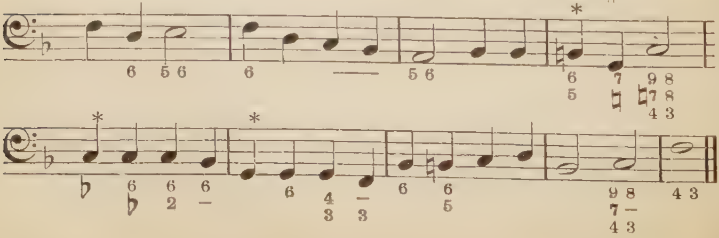
(1)



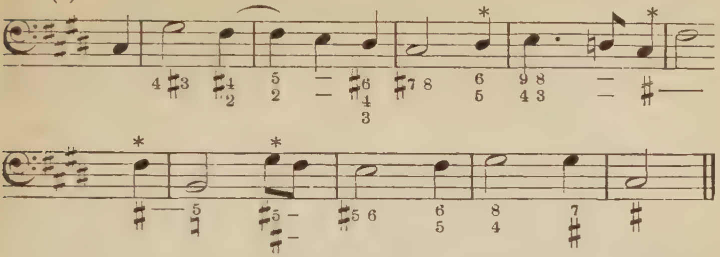
(2)



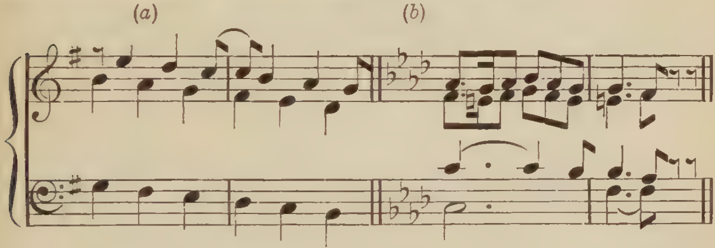
(3)



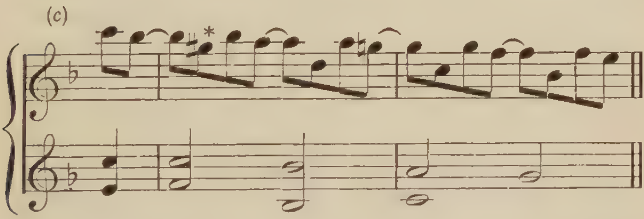
(4)



2. Figure the following extracts from Mozart: (*a*) and (*c*) are in three parts. For the note * *v.* §§ 520, 541.



(c)



CHAPTER XL.

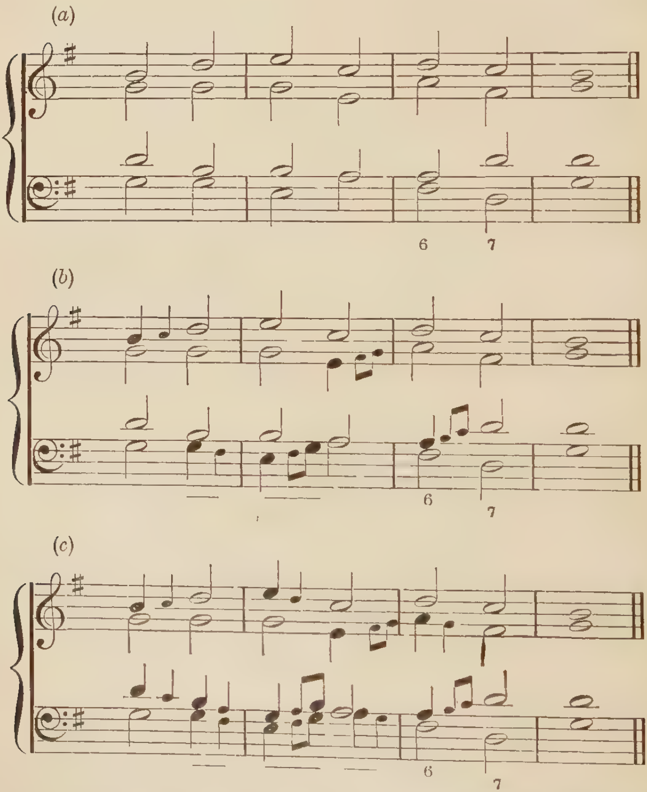
PASSING NOTES, AUXILIARY NOTES, ANTICIPATIONS, RETARDATIONS.

527. So far we have only used notes which are parts of chords or, as we may call them, *harmony notes.* For the sake of variety and embellishment notes which are not parts of chords are used, and we now proceed to explain them.

528. **Passing notes**[1] are notes used between harmony notes; they are used *to pass* from one harmony note to another.

Fig. 260 (*a*) shows a passage containing only *harmony notes*; (*b*) shows the same passage with *passing notes* added (printed in small type); (*c*) shows passing notes in several parts at the same time.

Fig. 260.



529. **Rules for passing notes.** Passing notes may be *diatonic*—in which case they will be according to the key in which the passage is written—or *chromatic*.

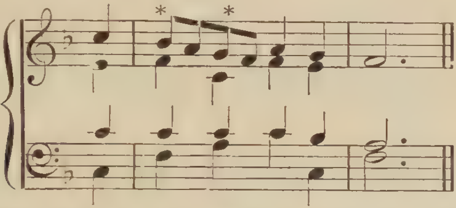
---

[1] Sometimes called *discords by transition*.

530. They may occur either on the unaccented or on the accented part of a beat, and, with the exception stated in § 543, they must always be quitted by step of a second.

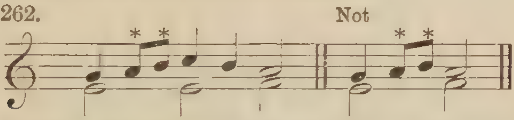
In fig. 260 (*b*) are seen unaccented passing notes; fig. 261 shows accented passing notes.

Fig. 261.



531. When there are two passing notes in succession, the second may not return to the first, but must proceed in the same direction until a harmony note is reached.

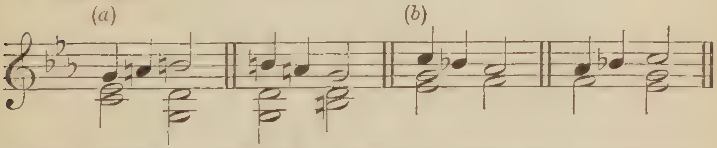
Fig. 262.



532. **Passing notes in minor keys.**—The melodic form of the minor scale (§ 349) is used to avoid the augmented interval between the sixth and seventh degrees of the harmonic minor.

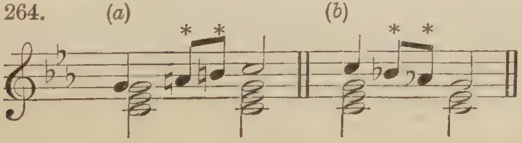
Thus in passing from the *dominant* upwards to the *leading-note*, or *vice versa*, the major sixth is used; in passing from the *tonic* downwards to the *submediant* the minor seventh is used.

Fig. 263.



533. In *rising* from the fifth to the root in the minor, the major sixth and seventh are used; in *falling* from the root to the fifth, the minor sixth and seventh are used.

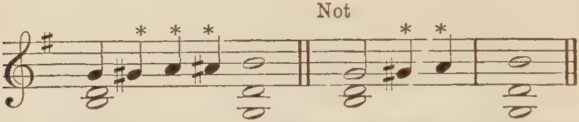
Fig. 264.



534. **Chromatic passing notes** may be used. When a chromatic passing note has been introduced, the passage must be continued in semitones until a harmony note is reached.

In writing chromatic passing notes the *arbitrary* form of the chromatic scale is usually employed (Part I. § 176).

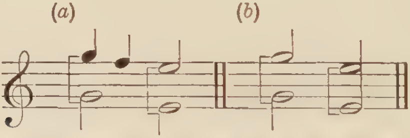
FIG. 265.



535. Passing notes occurring in several parts at the same time must make satisfactory combinations or else must move by contrary motion, fig. 260 (*c*).

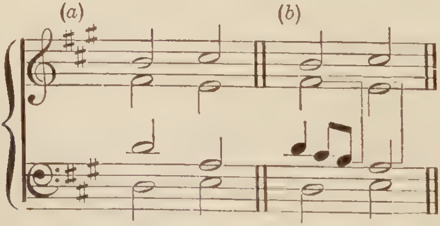
536. Passing notes do not justify an incorrect harmonic progression. Thus at (*a*) there are consecutive octaves just as much as at (*b*).

FIG. 266.



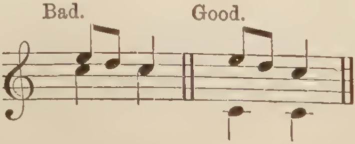
537. Care must be taken that the passing notes used do not produce consecutives. (*a*) *without* passing notes is correct, (*b*) *with* passing notes is incorrect.

FIG. 267.



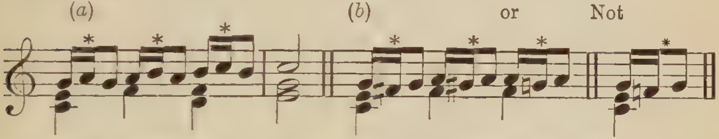
538. It is better not to let passing notes proceed by oblique motion to the *unison*; oblique motion to the octave is unobjectionable.

FIG. 268.



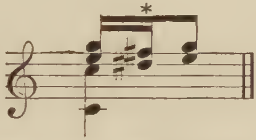
539. **Auxiliary**[1] **notes** are notes a second above or below harmony notes. When the auxiliary note is *above* the harmony note, it will be either a tone or a semitone above, according to the diatonic scale of the music. When the auxiliary note is *below*, it must be a semitone below, except when the harmony note is the major third of a chord, in which case the auxiliary note may be either a tone or a semitone.

FIG. 269.



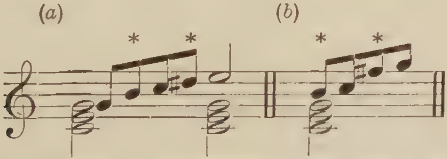
540. If, however, the fifth and third of a chord have auxiliary notes below at the same time, then the auxiliary note of the third *must* be a semitone below.

FIG. 270.



541. With the exceptions stated in § 543, auxiliary notes *must* be quitted by step of a second. They may be approached either by step (fig. 269) or by leap (fig. 271 (*a*)), and the leap may be by an augmented interval (§ 430). They may occur either on the accented or unaccented part of the beat (fig. 271 (*b*)).

FIG. 271.



---

[1] By some writers auxiliary notes and passing notes are classed together as passing notes. The difference between them is that passing notes *pass* from one harmony note to another, while auxiliary notes *return* again to the harmony note from which they started, as in fig. 269; or else merely stand before a harmony note, having no connection with the preceding harmony note, as in fig. 271.

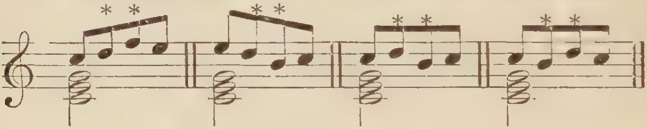
542. The *shake, turn, appoggiatura*, and *acciaccatura* are examples of the use of auxiliary notes.

543. **Changing notes.** There is an important exception[1] to the rule that *passing notes* and *auxiliary notes* must be quitted by step. A passing note or an auxiliary note, instead of proceeding or returning to the harmony note, may *leap* a third to the note on the other side of such harmony note, provided that it returns at once to the harmony note.

Passing notes and auxiliary notes used in this way are called **changing notes** (marked *).

FIG. 272.

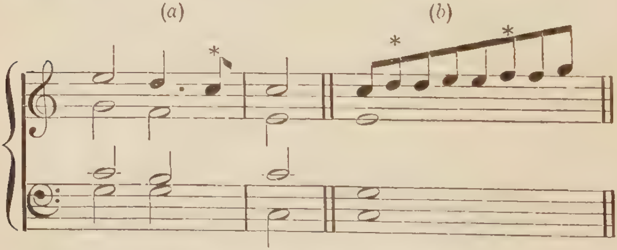
(*a*) Passing changing notes. (*b*) Auxiliary changing notes.



544. **Anticipations.** One note of a chord may be sounded before the others, *i.e.* during a preceding chord to which it does not belong. Such a note is then *anticipated*, and it is called an **anticipation** (*a*).

Passing notes, as well as harmony notes, may be anticipated (*b*).

FIG. 273.



At (*a*) C is sounded during the dominant seventh on G. It clearly belongs to the next chord.

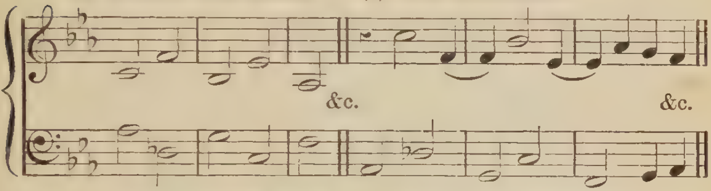
---

[1] There is another exception of common occurrence. When the harmony notes move by step of a second, the first harmony note may go to an auxiliary note in the opposite direction and then leap a third to the next harmony note. An example is seen on the fourth quaver of bar 2 in Exercise 1 (*b*), page 196.

545. **Retardations.** A note of a chord may be delayed by the holding on of a note from the preceding chord. Such delayed notes are called **retardations.** A *retardation* differs from a suspension by the fact that it may be quitted by leap.

FIG. 274. Beethoven, Op. 13.

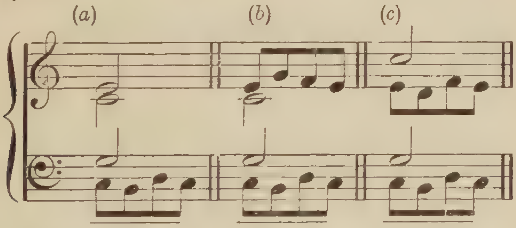
(*a*) Without *retardations*. (*b*) With *retardations*.



546. **Figuring.** *Passing notes*, &c., are not as a rule indicated in the figuring except in slow time. When passing notes, &c., occur in the bass, a straight line is drawn to indicate this, and in adding parts to such a bass the chord indicated at the beginning of the line is to be used and continued to the end of the line. Fig. 275 (*b*) (*c*).

Thus, in adding parts to a bass with changing notes, we sustain the chord indicated at the beginning of the line, fig. 275 (*a*), or we may add passing notes (*b*), or additional changing notes in some of the parts (*c*).

FIG. 275.



547. **Recapitulation of the various kinds of discords:**

(*a*) When the notes of a discord form part of the harmonic series of the root, the discord is called **fundamental** (§ 390).

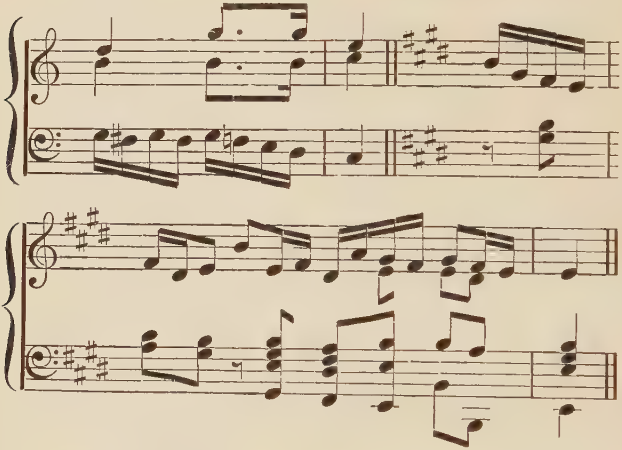
(*b*) When the notes of a discord, not being fundamental, are made up out of the diatonic notes of the scale, it is called a **diatonic discord.** Such are non-dominant sevenths and ninths (§§ 414, 574). As the dissonant note in a diatonic discord is an *essential* part of the chord, diatonic discords are often called **essential discords** to distinguish them from the next kind (*c*).

(*c*) When the dissonant note is no part of the chord in which it occurs, but is foreign to it, it is called an **unessential discord.** Such discords are *suspensions, passing notes, auxiliary notes*, &c.

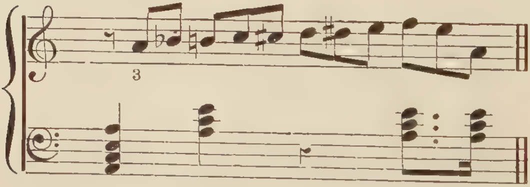
EXERCISES.

1. In the following examples explain all the notes which are not harmony notes and figure the bass.

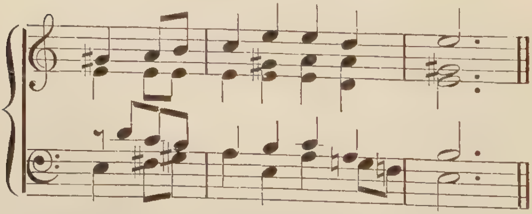
(*a*) Mozart. (*b*) Handel.



(*c*) Beethoven.

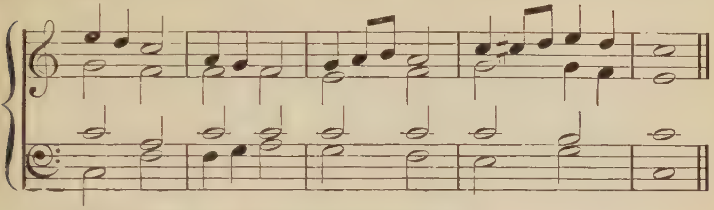


(*d*) Gounod (*v.* §§ 532–3).



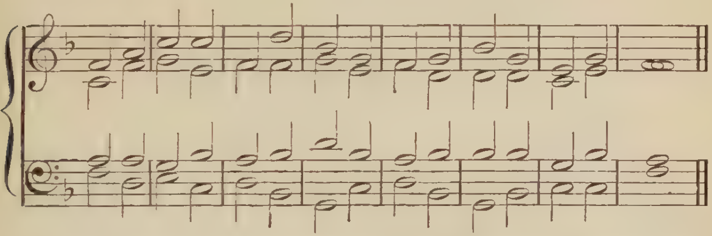
2. In Question 1 (*a*) why are the first and second F's sharp, while the third is natural? (§§ 529, 539).

3. Point out any errors in the use of passing notes in the following:—



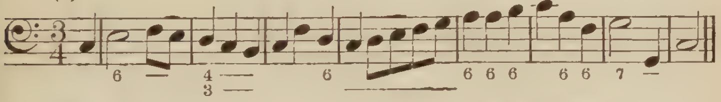
4. Add passing notes to the following:—

Passing notes in the *bass* in bars 3, 5, 6; *tenor*, bars 2 and 7; *alto*, bars 2, 4, 5; *treble* in all except bars 2 and 8.

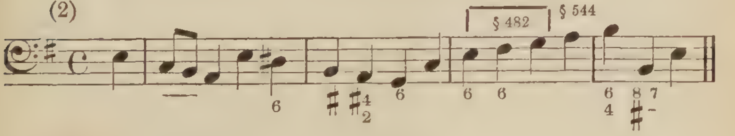


5. Add three upper parts to the following, introducing passing and auxiliary notes in any parts where possible:—

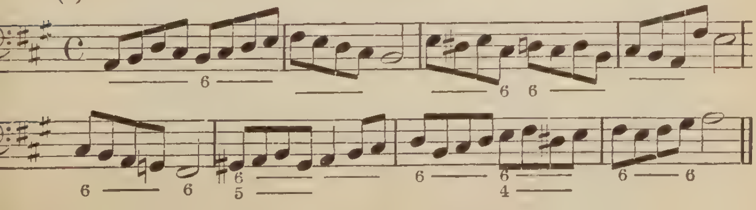
(1)



(2)



(3)



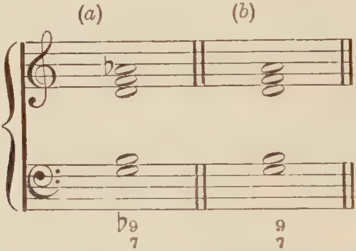
CHAPTER XLI.

CHORDS OF THE NINTH.

SECTION I. The dominant ninth.

548. By adding another *third* above the notes of the dominant seventh we get the chord of the *dominant ninth*. The ninth may be either *major* or *minor*, and so we get two varieties of the chord: (*a*) the *dominant minor ninth*, and (*b*) the *dominant major ninth.*

FIG. 276.



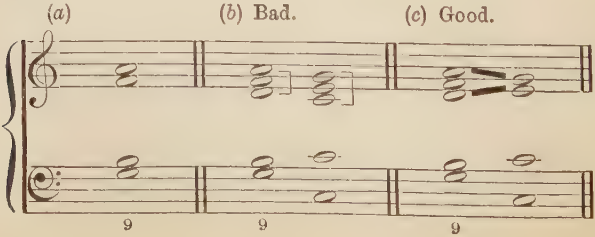
549. The dominant ninth is a **fundamental discord** (§ 390), and the ninth is dissonant and requires resolution. Of the other notes of the chord, the seventh and third follow the rules already explained in treating of the dominant seventh.

550. In *major* keys both the *major* and *minor* dominant ninth can be used; in minor keys only that with the *minor* ninth is available.

551. As this chord consists of five notes, one of them must be omitted in four-part music. When the chord is in its root position **the fifth is omitted** (*a*).

In five-part music the fifth will be required. When the *fifth* is below the ninth it must rise when resolving, or consecutive fifths will result (*b*).

FIG. 277.

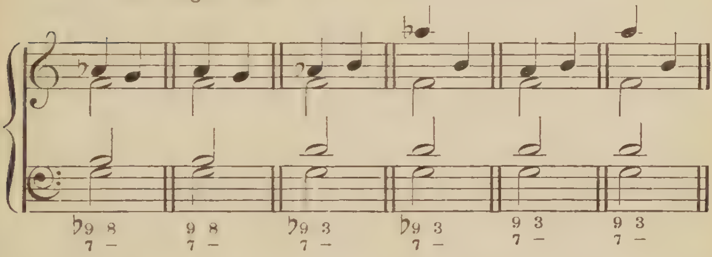


552. The **major ninth** must not be sounded *below* the *third*[1] because of the harsh effect. There is no objection to the *minor* ninth being below the third.

553. **Resolutions.** (*a*) The dominant ninth may resolve while the rest of the chord remains. In this case the ninth may proceed to the *root* or to the *third*.

It should be noted that the chord resulting from this resolution is a dominant seventh which still requires resolution.

FIG. 278.



(*a*) Dominant ninth resolving on root. (*b*) Resolving on the third.

554. In these resolutions it must be remembered that (except the ninth with the root in the bass) **the note on which a dissonant note resolves may not be sounded at the same time with that dissonant note** (§ 500 (*f*)). When, therefore, the ninth resolves on the third, the third must not be present in the chord, and the fifth must take its place (fig. 278 (*b*)).

Note that at (*b*), fig. 278, A♭–B upwards is an augmented interval, but this progression is here allowable by § 430.

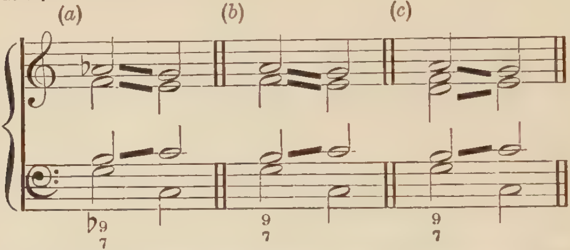
555. (*b*) The dominant ninth may resolve on the *tonic common chord.* The ninth falls a second, and the seventh and third follow the rules already explained.

---

[1] There is one important exception to this which the student may take note of, though we advise him to abstain from using it until considerable experience has cultivated his judgment. This is when the ninth descends at once to the root, the major third remaining.

At (*c*) an example is given in five parts to remind the student of the progression of the fifth (§ 551).

FIG. 279.



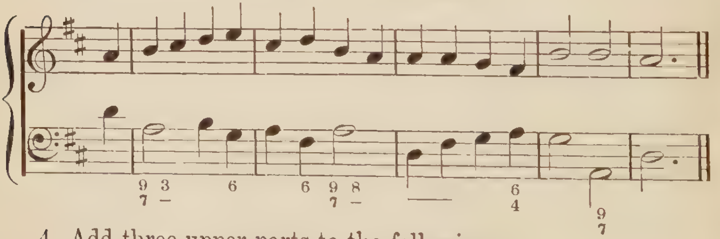
556. **Figuring.**—The dominant ninth is figured either 9 or $\frac{9}{7}$. When the minor ninth is used in major keys, a flat or a natural will be required in the figuring—*e.g.* $\flat^{9}_{7}$ or $\natural^{9}_{7}$.

EXERCISES ON SECTION I.

1. Write in four parts the *dominant minor ninth* resolving on the third of the chord in the keys of A major, F major, E♭ major, G minor, D minor, and C♯ minor.

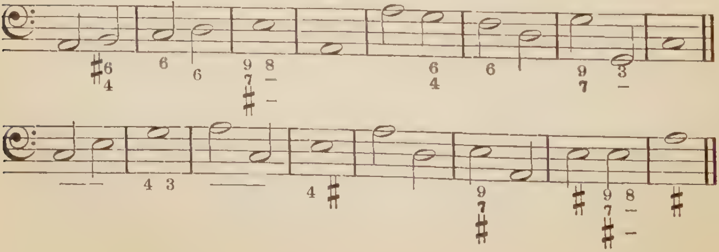
2. Write in four parts the *dominant major ninth* resolving on the tonic chord in A♭ major, D♭ major, and B major.

3. Add two inner parts to the following:—

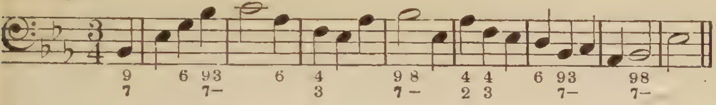


4. Add three upper parts to the following:—

(1)



(2)



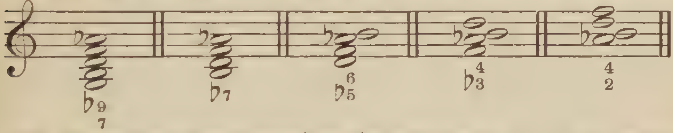
SECTION II. Inversions of the dominant ninth.

557. In the inversions of the dominant ninth the same notes are dissonant as in the original chord, and they are subject to the same rules of resolution. The root of a dominant ninth cannot be sounded in an upper part, and consequently *the root is omitted from all the inversions*,[1] but the *fifth* is always present.

558. **Inversions of the dominant minor ninth.** As there are four notes besides the root there are four inversions, all of which are available. They are shown in fig. 280 with their figuring.

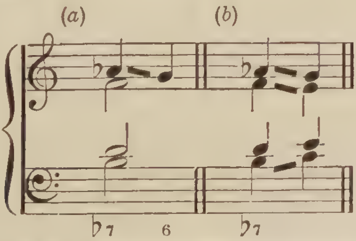
FIG. 280.

(*a*) Root pos. (*b*) First inv. (*c*) Second inv. (*d*) Third inv. (*e*) Fourth inv.



559. Throughout these inversions the same note (A♭) is the original ninth, and throughout it will be resolved as in the original chord (§§ 553–5). Similarly in each case F is the seventh and B the third, and these notes are throughout subject to the rules of §§ 375. It will then be necessary only to show the resolution of one inversion, for the student will find no difficulty in understanding the others. The resolution on the third will not be shown for reasons stated below.[1]

FIG. 281.



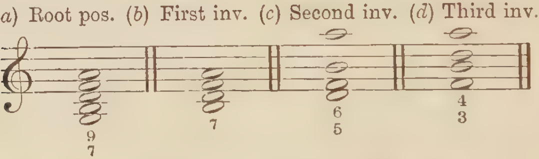
---

[1] There is an exception to this when the ninth resolves on the third. We have seen already that in that case the third cannot be used in the chord, and in this form the chord consists of root, fifth, seventh, and ninth, both in the root position and in all the inversions. These inversions, however, are rarely used.

560. The **first inversion** of the dominant minor ninth contains the interval of a diminished seventh (B♮–A♭). This chord is often called **the chord of the diminished seventh**, and it is so important in harmony that we shall devote Section III. of this chapter to the study of it, §§ 566–573.

561. **Inversions of the dominant major ninth.** We have already said that the major ninth must not be sounded below the third, and it is, therefore, clear that *the last inversion with the major ninth in the bass cannot be used.* The available inversions are shown in fig. 282, and after what has been said in § 559 it will not be necessary to show the resolutions.

Fig. 282.



Remember that in the case of the dominant major ninth the ninth *must* not be below the third (*v.* § 552).

562. The first inversion of the dominant major ninth is often called **the chord of the leading seventh.**

563. The figuring (fig. 282) of the inversions of the *dominant ninth* is identical with that of the *dominant seventh* and its inversions; but the student will not be likely to confuse the two if he keeps in mind the **roots of the chords he is dealing with.**

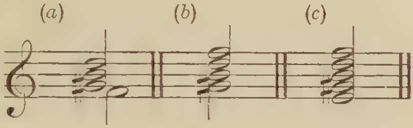
564. In finding the root of *fundamental discords* remember that the order in which the intervals occur, reckoning from the root, is **major third, perfect fifth, minor seventh, minor or major ninth** (§ 624).

565. **To find the root of a fundamental discord**: (*a*) arrange the chord so that the constituent notes stand a *third* above each other; (*b*) examine the intervals from the lowest note, and if the lowest interval is not a **major third, then** that lowest note is not the root; (*c*) add thirds below the lowest note until the order of intervals is major third, &c., as in § 564.

Thus in fig. 283, to find the root of chord (*a*), arrange in thirds as at (*b*). We now see that the lowest interval, G♯–B, is a *minor third*; G♯ is therefore not the root. Add a third *below* (*i.e.* E). The intervals now are

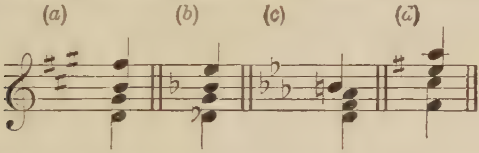
E–G♯, a *major third*; E–B, a *perfect fifth*; E–D, a *minor seventh*; E–F, a *minor ninth*. This is the order stated in § 564, and E is the root of the chord (*a*).

FIG. 283.



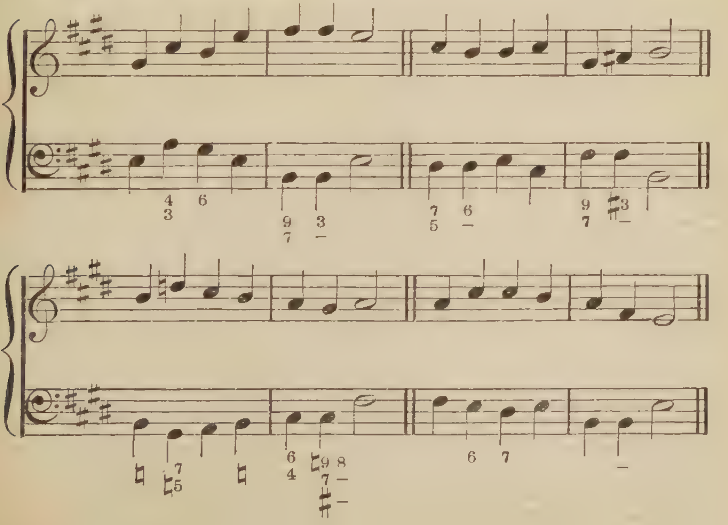
EXERCISES ON SECTION II.

1. Figure the following chords, and name their roots.



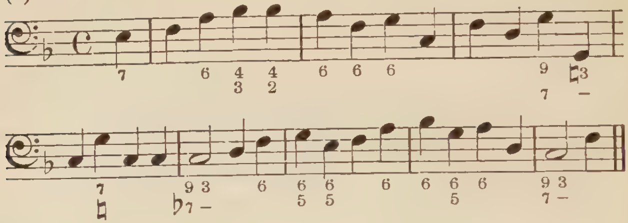
2. Write all the available inversions of the *dominant major ninth* in B♭ and E major, resolving each on the tonic common chord (or one of its inversions). Do the same for the *dominant minor ninth* in F and C♯ minor.

3. Add two inner parts to the following:—

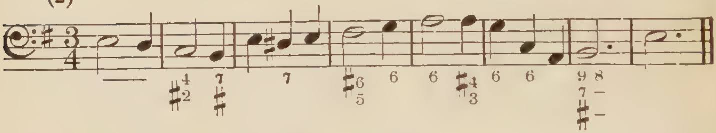


4. Add three upper parts :—

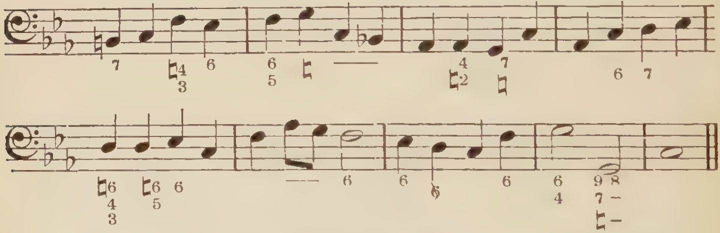
(1)



(2)



(3)



SECTION III. The diminished seventh ; enharmonic modulation.

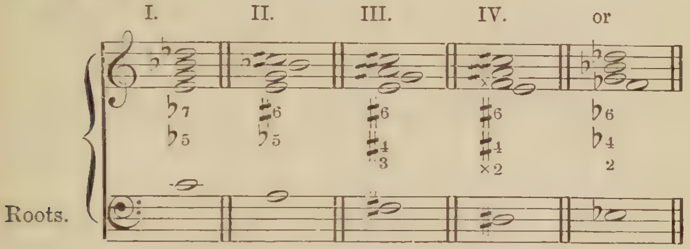
566. The chord of the **diminished seventh** is the first inversion of the *dominant minor ninth*, and it occurs on the leading note of either major or minor keys. This chord is made up of three successive *minor thirds* ranged one above the other. This interval of a *minor third* is very convenient for enharmonic[1] changes ; and as the diminished seventh consists of notes separated by this interval, we find this chord much used with enharmonic change.

---

[1] When two notes with different names have the same sound (*i.e.* are played by the same key on instruments like the piano), they are said to be **enharmonic** to each other. Thus C♯ and D♭ are **enharmonic**, because on a piano they both have the same sound. If C♯ occurs in a chord and D♭ in the following chord (*i.e.* D♭ written instead of C♯ a second time), it would be called an **enharmonic change** (*v.* Pt. I. §§ 163-173).

567. As an example we will take the diminished seventh on E♮ and make the enharmonic change in one note at a time, beginning with the highest note.

Fig. 284.



I. The root of this chord is evidently C.

II. Here we change the highest note enharmonically by writing C♯ for D♭. The chord still sounds exactly as it did in I., but we have changed the harmonic origin; for if we rearrange this chord as explained in § 565, we shall find that its root is A.

III. is obtained from II. by enharmonically changing the second note from the top (A♯ for B♭). Following § 565 the root is now F♯.

IV. is obtained from III. by enharmonically changing the next (*i.e.* the third) from the top (F× for G♮). By § 565 the root is now D♯.

568. Note.—The chord IV. is most conveniently got by taking the original diminished seventh and enharmonically altering the *lowest* note (F♭ for E♮), when its root will be E♭. Notice that the two forms of IV. are identical in sound.

569. The following facts may assist the student in remembering the above changes:—

(*a*) The changes are made from the highest note downwards.

(*b*) The chords obtained by the changes are in the following order: 7; $\substack{6\\5}$; $\substack{6\\4\\3}$; $\substack{6\\4\\2}$; *i.e.* respectively the first, second, third, and fourth inversions of a dominant minor ninth.

(*c*) *When the changes are made in this order* the root of each chord is a minor third below the root of the previous chord (*e.g.* C, A, F♯, D♯).

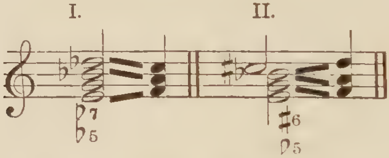
570. We must now see to what use these changes are put. The chord I. evidently belongs to F major or minor, for it is derived from the dominant ninth (root C) of those keys. But the chord II. is derived from the root A, *i.e.* from the chord on the dominant of D major or minor. Now, suppose the chord I.

occurs in a piece in F major or minor, if it were regularly resolved we should continue in F. But by enharmonically altering the chord we can resolve in the key of D major or minor. Thus by means of the enharmonic change we can modulate from F major or minor to D major or minor. Similarly by using III. we go to B major or minor, and by IV. to G♯ (or A♭) major or minor.

571. When a modulation is brought about by enharmonic change it is called an **enharmonic modulation.**

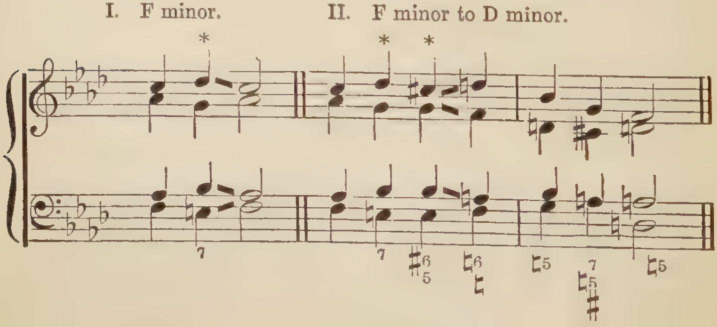
572. Note. In using these chords the relation of each note to its root must be considered—*e.g.* in I. D♭ is the minor ninth and must *fall*; B♭ is the seventh and must *fall*; E is the leading-note and must *rise*. In II. C♯ is the leading-note and must *rise*; B♭ is the ninth and must *fall*, &c., thus:

Fig. 285.



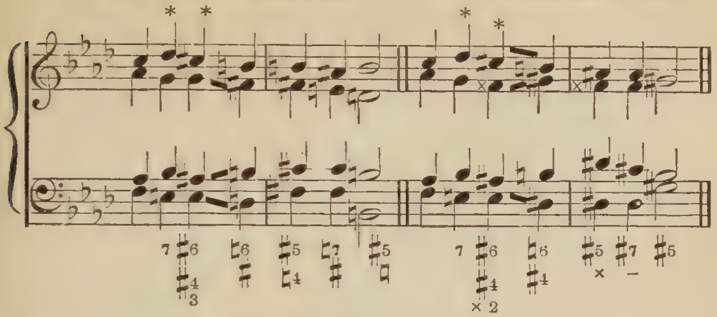
573. To complete the subject we add examples of the use of the chords in fig. 284 modulating to minor keys. The student can easily make each modulation to the corresponding major key by remembering § 484. (See also § 665*a*).

Fig. 286.


I. F minor.

II. F minor to D minor.

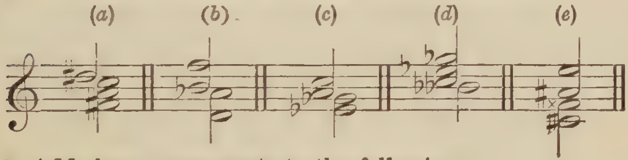
III. F minor to B minor. IV. F minor to G♯ minor.



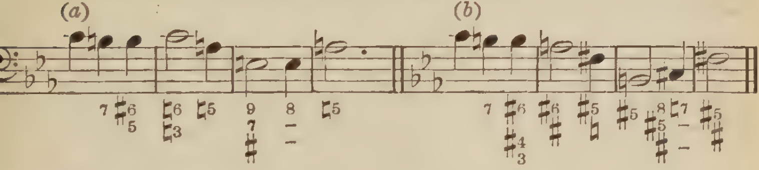
Exercises on Section III.

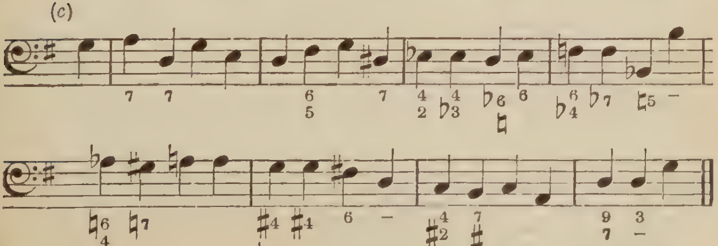
1. Write the *diminished seventh* on C♯ and resolve it correctly; make enharmonic charges in three ways and give new resolutions. Add figuring and name the root of each chord. Do the same with the diminished sevenths on F♯, on D, on G♯.

2. Figure the following chords and give the roots:



3. Add three upper parts to the following:

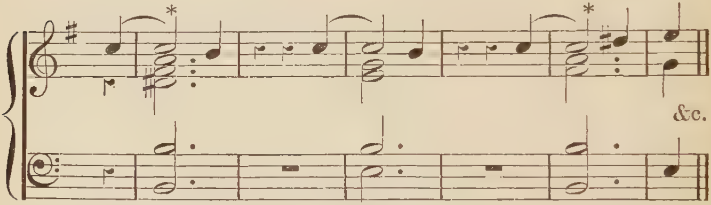




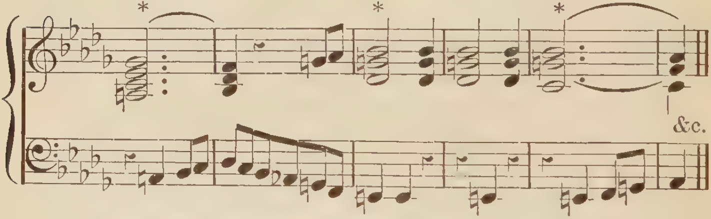
4. Write a few bars modulating by means of the *diminished seventh* (*a*) from E♭ major to A minor; (*b*) from E♭ major to F♯ minor.

5. Figure the chords marked *, name their roots, and explain their resolution.

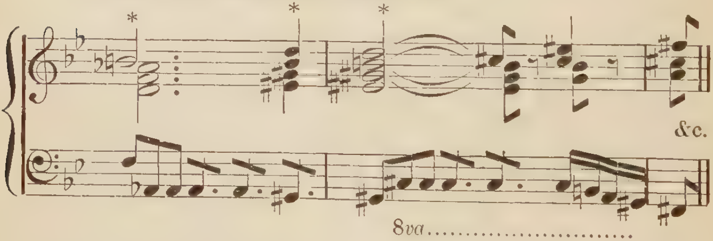
(*a*) Beethoven, Op. 90.



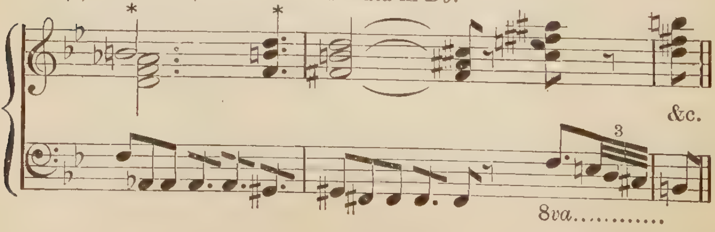
(*b*) Beethoven, Op. 10, No. 2.



(*c*) Schubert, Posthumous Sonata in B♭.



(*d*) Schubert, Posthumous Sonata in B♭.



SECTION IV. Secondary Ninths.

574. If we add a third above a secondary chord of the seventh we get a **secondary chord of the ninth.** Secondary ninths are resolved on a chord (concord or discord) whose root is a *fourth* above the root of the ninth.

575. The ninth must be prepared, and must resolve wherever it occurs by *falling* one degree. The ninth should be written above the *third*, and it is generally most convenient to place it in the highest part.

576. The seventh is treated exactly as in secondary sevenths, except in the first and second inversions, where, as the root is omitted, the seventh ceases to be dissonant and needs neither preparation nor resolution. In the third inversion, the seventh forms the interval of a fourth with the third of the original chord, and is therefore dissonant and requires both preparation and resolution.

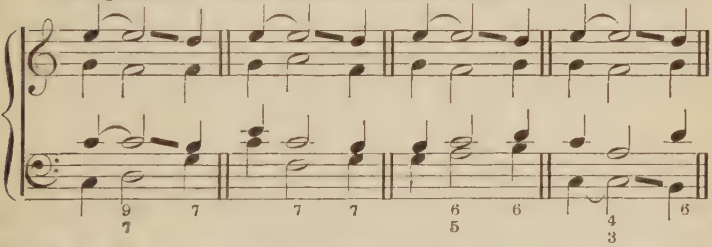
The fifth of the chord being a fifth below the ninth requires care to avoid consecutive fifths (compare § 551).

577. **Inversions.** There are four inversions of secondary ninths, but the last inversion with the ninth in the bass cannot be used.

The **root** is omitted in all the inversions.

FIG. 287. Secondary ninths with resolutions.

Root position. First inversion. Second inversion. Third inversion.



578. It will be seen that the figuring of the inversions of secondary ninths is identical with that of secondary sevenths and their inversions (chap. xxxiv.). These inversions, however they have been approached, may be left either as inversions of ninths or of sevenths, with the exception of the third inversion of the ninth, which is not available as a second inversion of a seventh. Whether these chords are ninths or sevenths will be recognised by the resolution.

FIG. 288.

Ninths. First inversion. Second inversion. Third inversion.

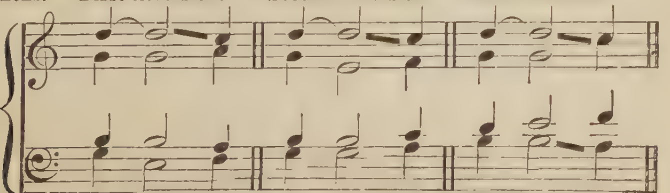
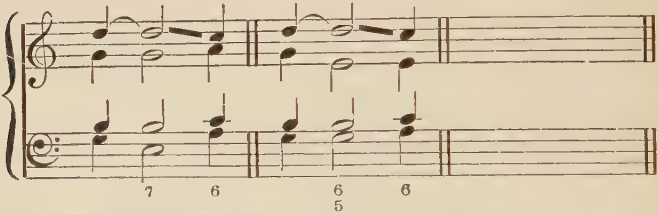


FIG. 288 *continued.*


Sevenths. Root position. First inversion. Second inversion not available.

579. A secondary ninth may be used on any note, provided the dissonant notes can be properly prepared and resolved. Thus there is no ninth on the subdominant because its resolution would necessitate the leap of an augmented fourth in the bass, and because there is no common chord on the leading-note, the bass on which it would have to resolve.

580. In minor keys the small number of secondary ninths possible is due to the augmented interval in the harmonic minor scale, necessitating movement by an augmented interval which is forbidden except in sequences.

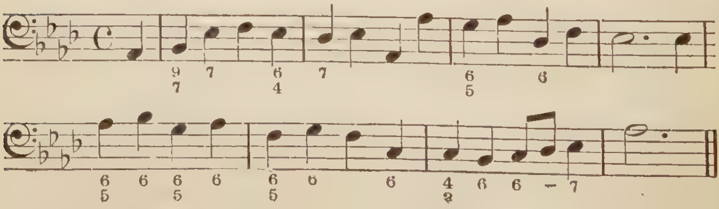
It would be an interesting exercise to write secondary ninths on each degree of the minor scale and explain which of these are not allowed. Secondary ninths are not so much used as secondary sevenths, and they are of comparatively little importance in actual composition.

EXERCISES ON SECTION IV.

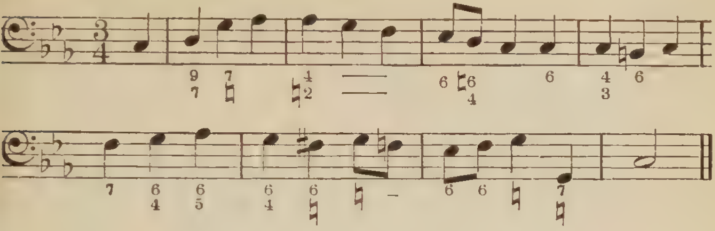
1. Write the secondary ninth on the tonic of C minor, and show why this chord is not available. Write all the inversions and say which (if any) are available, giving reasons where an inversion is unavailable.

2. Add three parts to the following basses and name the root of every chord. In the case of the secondary ninth indicate as in fig. 287 the resolution of the ninth and (when necessary) the seventh.

(*a*)



(*b*)



CHAPTER XLII.

THE DOMINANT ELEVENTH.

581. By adding a *third* above the dominant ninth we get the chord of the dominant eleventh. The ninth may be *minor* or *major*[1] (§ 550).

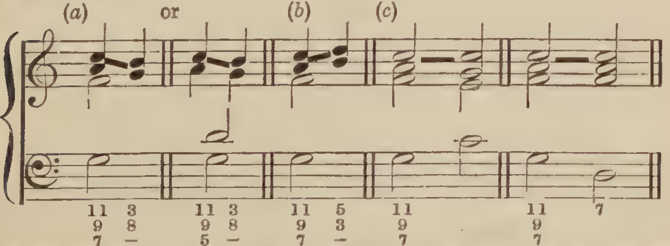
582. The eleventh may resolve while the rest of the chord remains, in which case it proceeds: (*a*) to the *third*; (*b*) to the *fifth* of the chord.

Or the chord may resolve on a chord from another root, viz. the *tonic common chord* or a *supertonic discord*; in these cases the eleventh *remains* to be a note of the chord of resolution (*c*).

Note.—When the eleventh resolves on the fifth, the major ninth usually proceeds at the same time to the third as at (*b*).

Figuring.—In fig. 289 the eleventh is figured 11 to show more clearly its origin. In actual practice the eleventh appears as a fourth, *i.e.* the simple interval from the root instead of the compound (§ 252).

Fig. 289.



---

[1] Of course it cannot be *major* in a *minor* key.

583. The following points should be noticed in the chords shown in fig. 289.

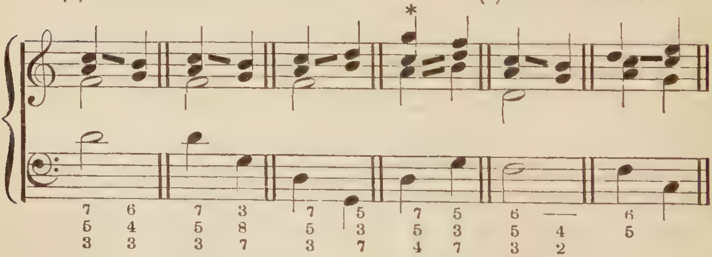
(1) The third and fifth are usually omitted from the chord.

(2) The third *must* be omitted from the chord when the eleventh resolves on the 3rd (*a*). The fifth must be omitted whenever the eleventh resolves on the fifth (*b*).

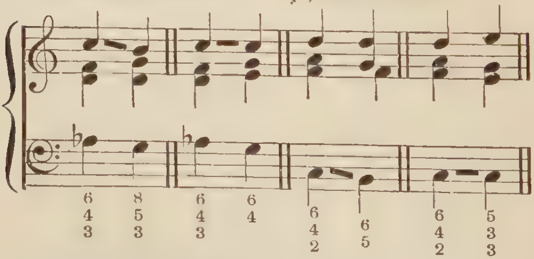
584. **Inversions.**—The root is omitted from all the inversions, except when the eleventh and ninth resolve respectively on fifth and third, as at * fig. 290. The seventh and ninth are subject to the rules of the dominant seventh and ninth. When, however, those notes of the chord with which the seventh or ninth is dissonant are not present, the seventh and ninth are free in their progression. There are five inversions, but the first is very rarely used. In fig. 290 will be found the more important forms of the inversions with their common resolutions. The fourth inversion can only be used with the *minor* 9th.

FIG. 290.

(*a*) Second inversion. (*b*) Third inversion.



(*c*) Fourth inversion. (*d*) Fifth inversion.



585. The **added sixth.**—The most familiar inversion of the dominant eleventh is the third. It occurs on the seventh from

the root of the chord, *i.e.* on the **fourth** of the scale. This chord is often called the **added sixth**, because it looks like the subdominant triad with a sixth added. It is very much used immediately before the dominant chord in perfect cadences.

FIG. 291.

586. It will have been noticed that many of these forms of the inversions of the dominant eleventh are identical with the secondary seventh on the supertonic, and that while the student was advised to prepare the secondary sevenths he may use the dominant eleventh like all *fundamental discords*, without preparation. This is merely another way of regarding the same chord, and bears out what we said in § 427, viz. that at first this secondary seventh was only used as a prepared discord, but that when by degrees men's ears recognised it as part of a dominant chord it ceased to require preparation, and also became freer in its resolution.

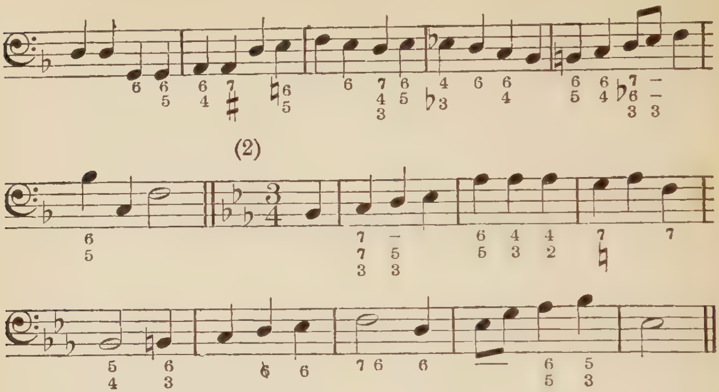
EXERCISES.

1. Write out the dominant eleventh (in four parts) in the key of F minor with several resolutions. Write inversions of the chord as in fig. 290, with figuring and resolutions.

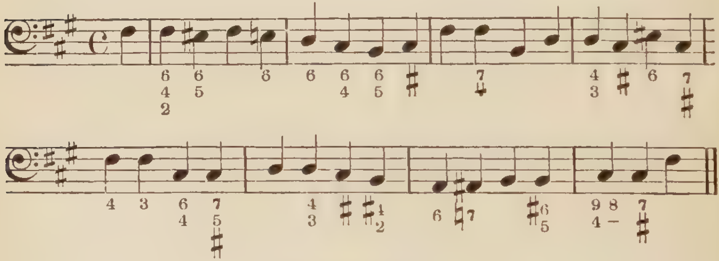
2. Write with resolution the chord of the added sixth in G, A♭, and B major; in F, C♯, and B minor.

3. Add three upper parts to the following:

(1)



(3)

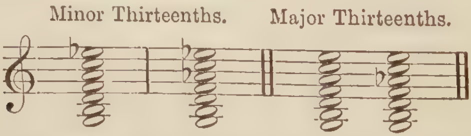


CHAPTER XLIII.

THE DOMINANT THIRTEENTH.

587. The **dominant thirteenth** is obtained by adding a third above the dominant eleventh. This third may be *major* or *minor*, and we therefore get the following varieties of this chord:

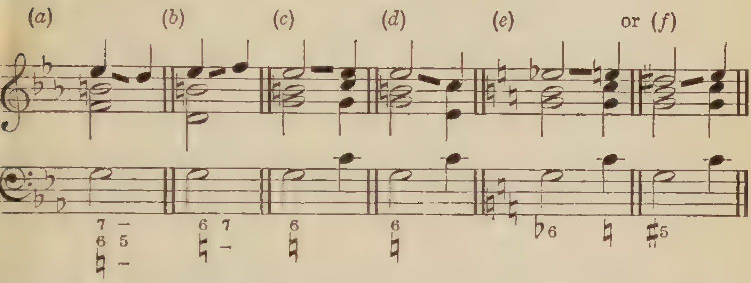
Fig. 292.



588. **Resolution.**—The thirteenth may resolve while the rest of the chord remains: (*a*) on the fifth, or (*b*) the seventh of the

same chord; or it may resolve on the tonic common chord. In this case the thirteenth may remain (*c*), fall a third (*d*), or rise a semitone (*e*).

FIG. 293.



589. NOTES.—1. The form of the chord shown at (*e*) is very frequently written enharmonically for convenience, as at (*f*). Such a way of writing a note is often called **convenient notation.**

2. The form of the chord at (*e*) and (*f*) can only occur in *major* keys.

3. In **figuring** the thirteenth is usually given as a sixth, the simple interval instead of the compound, but in writing out exercises *the thirteenth should not be sounded* **below the seventh** except in the last inversion, when it is in the bass.

590. The chord of the thirteenth very rarely occurs in its complete form. In using the chord the principle explained in § 554 must be observed, *e.g.* when the thirteenth resolves on the fifth, that note must not be present in the chord, &c.

The treatment of the notes of the chord up to the eleventh is exactly what has been already explained in Chapter XLII., with, of course, the proviso of § 584.

There are six inversions, but of these the fifth, having the eleventh in the bass, is very rarely used.

591. The usual forms of the chord are—

(*a*) The thirteenth with the root and third.

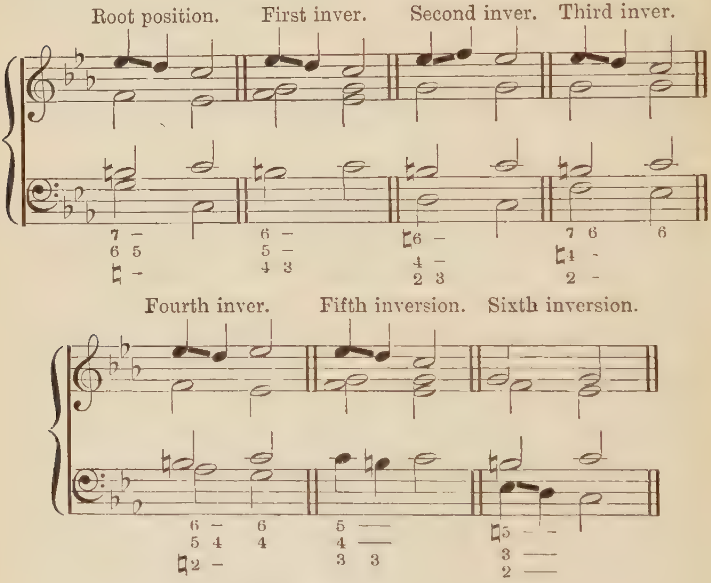
(*b*) The thirteenth with the root, third, and fifth. This is chiefly used in its last inversion.

(*c*) The thirteenth with the root, third, and seventh, when the thirteenth must be sounded above the seventh.

(*d*) The thirteenth with the root, third, seventh, and ninth (*major* or *minor*).

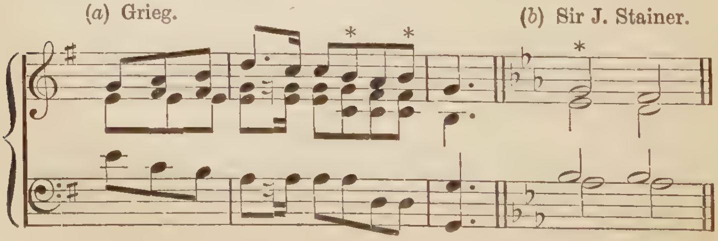
The *minor* thirteenth is given, but the student can easily rewrite these examples, using the *major* thirteenth with the additional rule that when the *major* thirteenth resolves on the tonic chord the thirteenth must leap to the tonic (compare fig. 293 (*d*)).

FIG. 294.

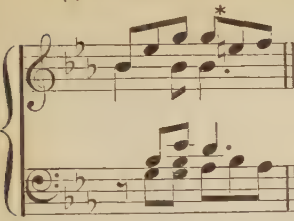


EXERCISES.

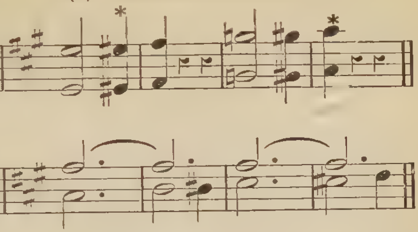
1. Figure the chords marked * and name their roots, and describe the method of resolution.



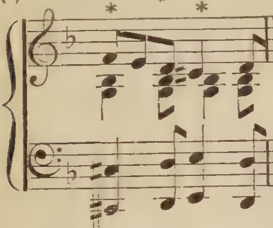
(*c*) Schubert, Op. 122.



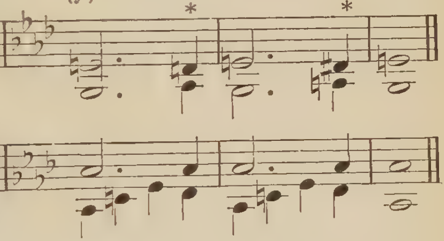
(*d*)[1] Beethoven, Op. 12, No. 2.



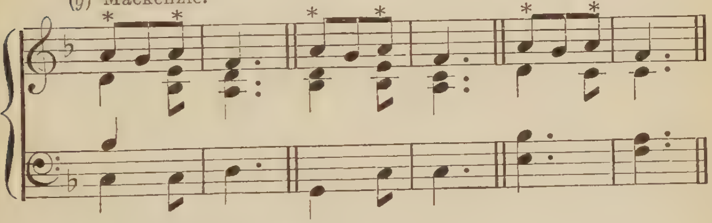
(*e*) Beethoven, Op. 10, No. 3.



(*f*) Gounod.

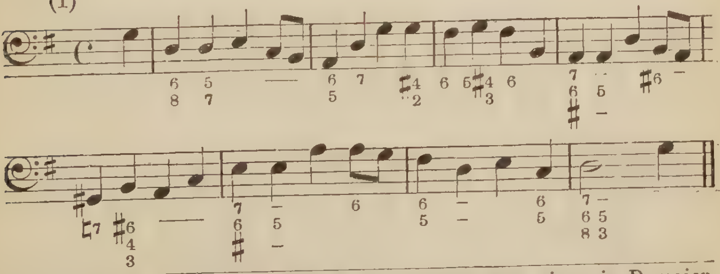


(*g*) Mackenzie.



2. Add three upper parts.

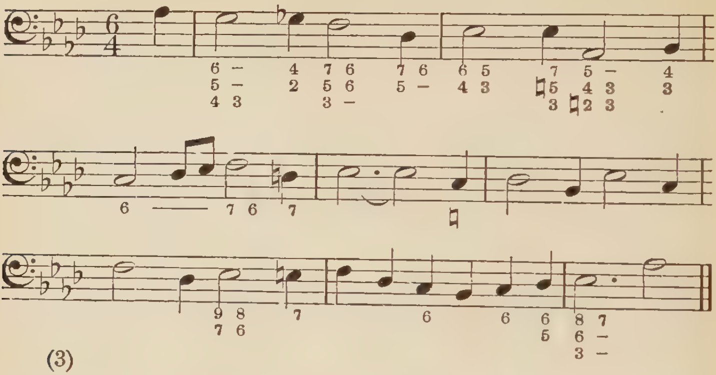
(1)



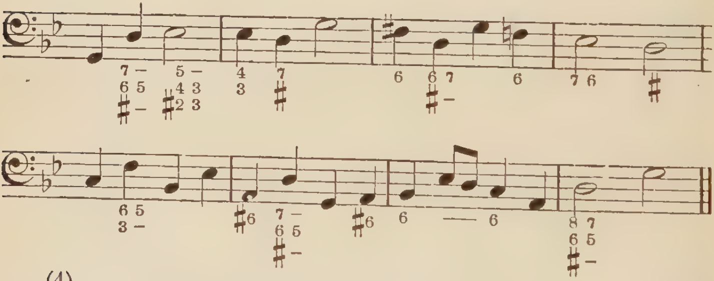
---

[1] The key, as would be seen if the context were given, is D major, although the signature is three sharps. There is a violin part above this extract, but it in no way alters the constitution of the chords.

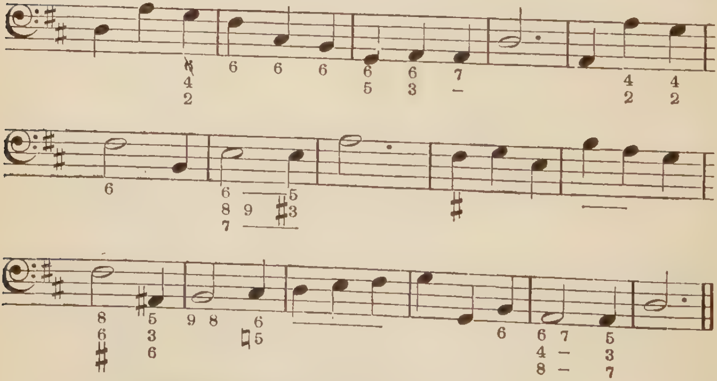
(2)


6
4
6 – 4 7 6 7 6 6 5 7 5 – 4
5 – 2 5 6 5 – 4 3 ♮5 4 3 3
4 3 3 – 3 ♮2 3
6 — 7 6 7
♮
9 8 7 6 6 6 8 7
7 6 5 6 –
3 –

(3)


7 – 5 – 4 7 6 6 7 6 7 6
6 5 4 3 3 ♯ ♯ – ♯
♯ – ♯2 3
6 5 ♯6 7 – ♯6 6 — 6 8 7
3 – 6 5 6 5
♯ – ♯ –

(4)

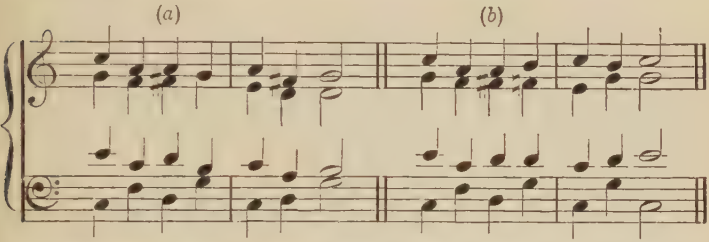

♮ 6 6 6 6 6 7 4 4
4 5 3 – 2 2
2
6 6 5
8 9 ♯3
7
♯
8 5 9 8 6 6 6 7 5
6 3 ♮5 4 – 3
♯ 6 8 – 7

CHAPTER XLIV.

CHROMATIC CONCORDS.

592. In fig. 295 the chord (*a*) is used to modulate to the key of G; at (*b*) the same chord is used but in this case no modulation is produced.

FIG. 295.



593. Any chord must belong either to the key of the passage preceding it or to the key of the passage following it. (*a*) above is clearly the dominant common chord in the key of G, for it is used to produce a modulation. But in the case of (*b*) the passage before and the passage after are both in the key of C, and the chord (*b*) therefore belongs to the key of C and it is called a chromatic chord.

594. A **chromatic chord** is one which contains one or more notes foreign to the signature [1] of the key in which it occurs, but which does not cause a modulation.

Note.—*Chromatic chords* do not of necessity contain a chromatic interval.

595. **Chromatic chords which may be used in both major and minor keys** are the major common chord on the supertonic; the major common chord on the minor second.

596. The **major common chord on the supertonic** has in the major its third, and in the minor its third and fifth, chromatically altered.

The *third* of this chord (which is the augmented fourth of the key) may *never be doubled*, and in moving to the following chord it must either rise or fall a semitone.

---

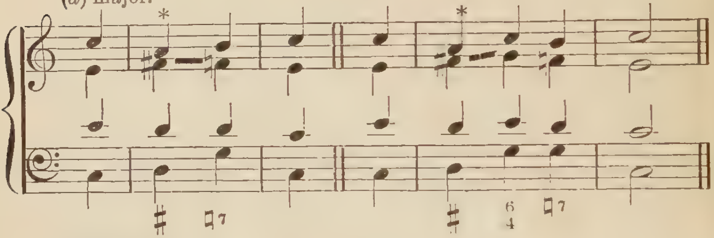
[1] The accidental used with the leading-note of minor keys is not considered chromatic, because, although not indicated in the signature, it belongs to the key.

In order that this chord may not produce modulation, it must be followed by some chord containing the unaltered diatonic fourth of the scale, or by some form of the tonic common chord.

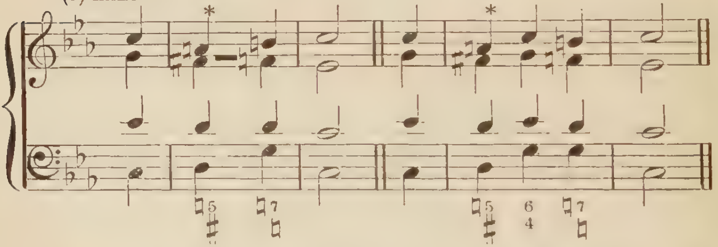
The chord may be used in its first inversion, subject to the same rules.

FIG. 296.

(*a*) major.

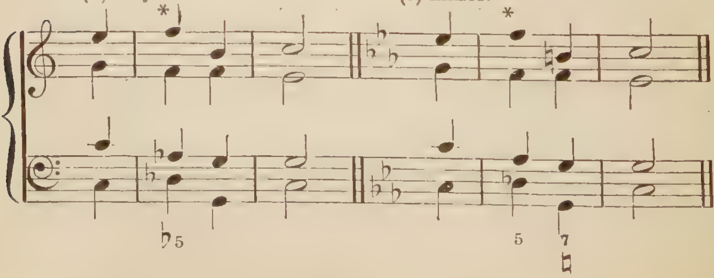


(*b*) minor.



597. **The major common chord on the minor second** may double its third, and there is no restriction as to what chord shall follow it.

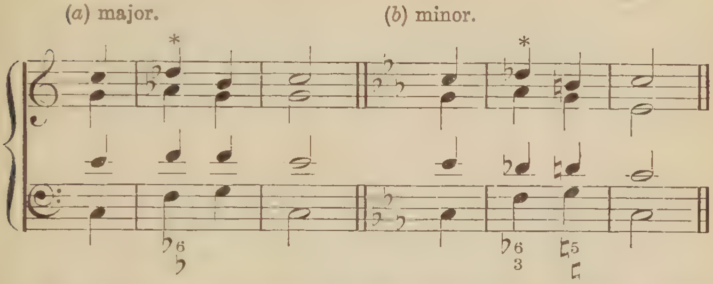
FIG. 297.


(*a*) major.

(*b*) minor.

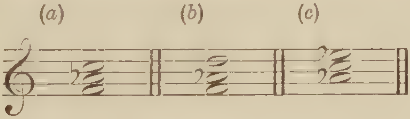
598. The *first inversion* of the major common chord on the minor second occurs on the fourth of the scale. It is of very common occurrence, and is called the **Neapolitan sixth.**

FIG. 298.



599. In addition to the chromatic chords described above, all the common chords peculiar to the minor key, with the exception of the minor common chord on the tonic, may be taken chromatically together with their available inversions in the major key. These are (*a*) a minor common chord on the *subdominant*, with its first and second inversions. (*b*) A first inversion with a minor third on the *subdominant.* (*c*) A major common chord on the *minor sixth* of the key with its first inversion.

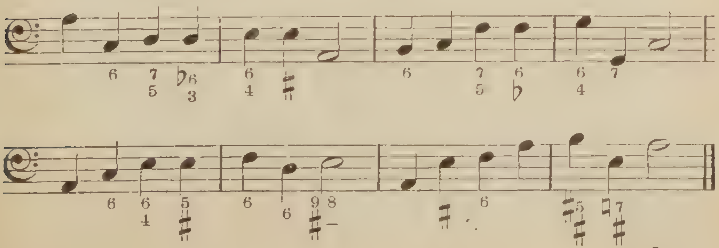
FIG. 299.



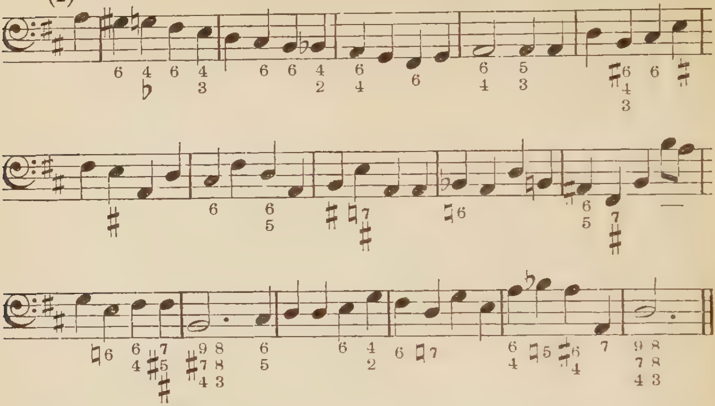
EXERCISES.

Add three upper parts to the following :—

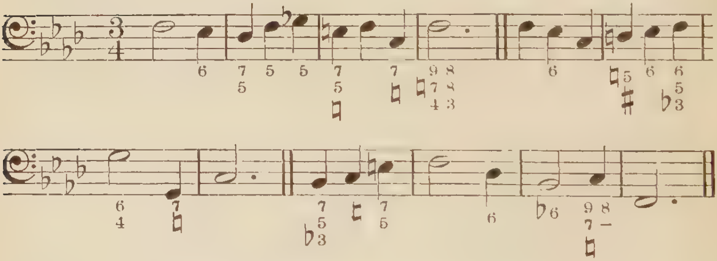
(1) Hymn Tune.



(2)



(3)



CHAPTER XLV.

CHROMATIC FUNDAMENTAL DISCORDS.

SECTION I.—**Supertonic and Tonic Sevenths.**

600. Chromatic chords of the seventh are used on the *supertonic* and on the *tonic* of major and minor keys. These chords consist of exactly the same intervals as the dominant seventh, and they are therefore *fundamental discords*.

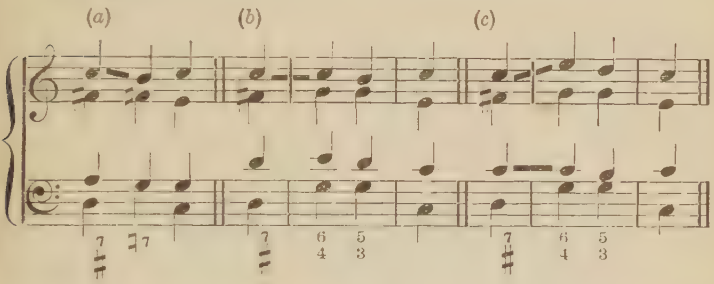
601. The **supertonic seventh** is obtained by adding a *minor third* above the chromatic common chord on the supertonic (§ 596).

602. The *supertonic seventh* must be followed by some chord containing the diatonic fourth of the key, or by some form of the tonic common chord, as in § 596.

The **third** of this chord can never be doubled, and in resolving it must either *rise* or *fall* a semitone.

The **seventh** must *fall* a second, or *remain* to be a note of the following chord. In the latter case, the seventh may be doubled, when one of the doubled sevenths may leap while the other remains.

FIG. 300.

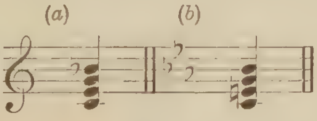


603. The *supertonic seventh* is used in all its three inversions, subject to the same rules as in the original position. In the second inversion the root may be omitted and the seventh doubled, thus giving a chromatic chord of the sixth (with a major sixth) on the submediant.

604. The **tonic seventh** consists of the **major** common chord on the tonic, to which is added a minor seventh.

In major keys the seventh and in minor keys the third is chromatic.

FIG. 301.



605. The *tonic seventh* must be followed[1] by a dominant discord, or by a supertonic discord.

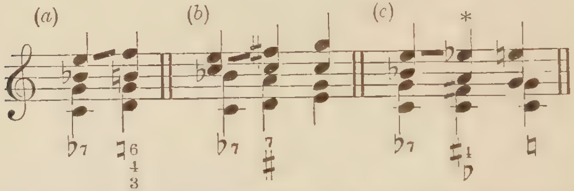
---

[1] It may also be followed by the *subdominant* chord, provided that the chords which immediately follow such resolution are distinctive of the key (*v.* Ex. (*d*) p. 232).

606. The **third** of this chord must never be doubled; it must either (*a*) *rise* a minor second, or (*b*) *rise* a major second, or (*c*) *fall* a chromatic semitone.

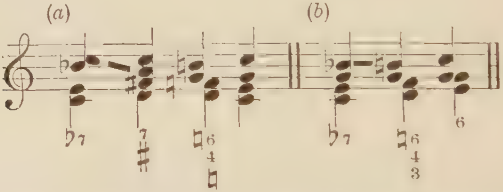
607. The **seventh** of this chord must either (*a*) *rise* a chromatic semitone, or (*b*) *fall* a second.

FIG. 302.



* This chord is the third inversion of a chromatic supertonic ninth, described in § 609.

FIG. 303.

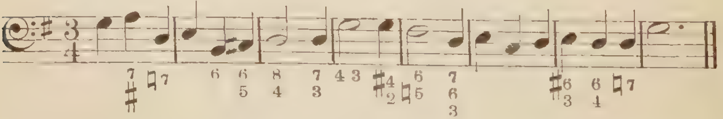


608. The tonic seventh may be used in all its three inversions subject to the same rules as in the original position. In the second inversion the root may be omitted, but the seventh may not be doubled. This gives a chromatic chord of the sixth (with a minor third) on the dominant.

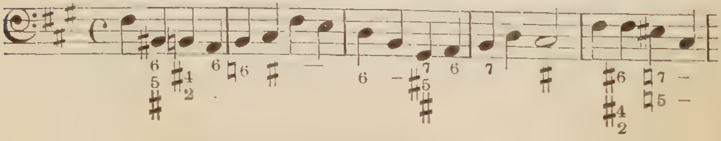
EXERCISES ON CHROMATIC SEVENTHS.

Add three parts to the following basses:—

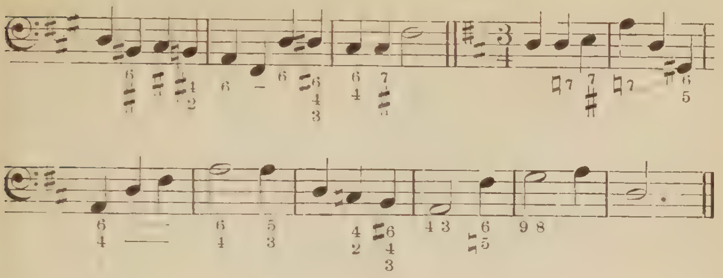
(1)



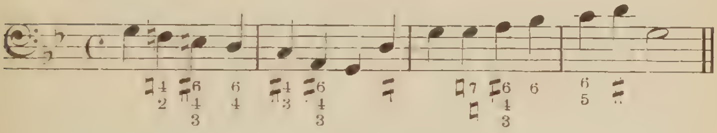
(2)



(3)



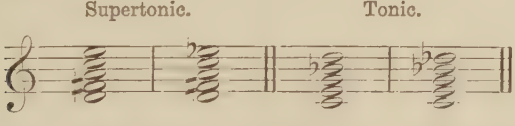
(4)



SECTION II.—Supertonic and Tonic Ninths.

609. Chromatic chords of the ninth are formed by adding a third, *major* or *minor*, above the chromatic chords of the seventh on the *supertonic* and *tonic*.

FIG. 304.



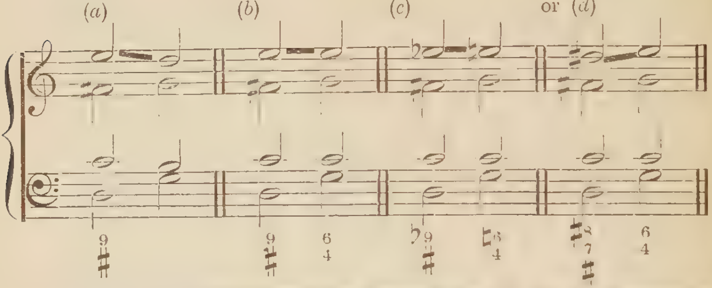
610. In minor keys the minor form alone is available; in major keys both forms are used.

611. The **supertonic ninth** may be resolved on the root, or third, of the chord, while the rest of the chord remains. It then follows all the rules of the dominant ninth (§§ 553-4).

612. The *supertonic ninth* may also be resolved on a *dominant discord*, or on an inversion of the chord of the tonic (cf. § 602). The ninth must then (*a*) *fall* a second, (*b*) *remain* to be a note of the next chord, or (*c*) if minor, *rise* a chromatic second.

The other constituents of this chord, up to the seventh, are subject to the rules already explained in treating of the *supertonic seventh* (§ 602).

Fig. 305.

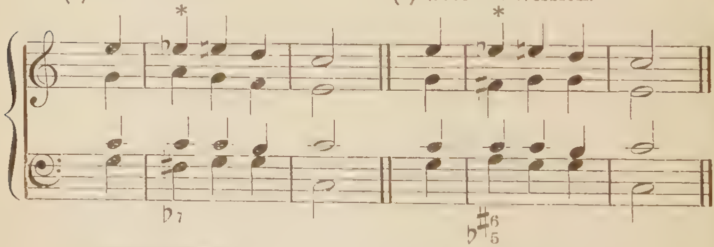


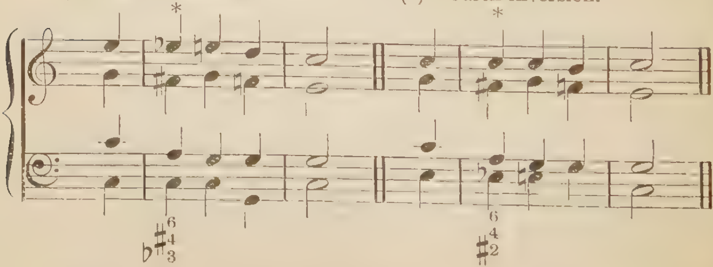
613. The minor ninth resolving upwards as at (*c*) is frequently (especially in the *inversions*) written as at (*d*)—a chromatic semitone above the root.

614. The rules for the omission of the root and for the position of the third and the major ninth, and for the available inversions, are the same as for the dominant ninth (chap. xli.).

Below are shown the inversions of the **supertonic minor ninth**, with figuring.

Fig. 306.


(*a*) First inversion. (*b*) Second inversion.

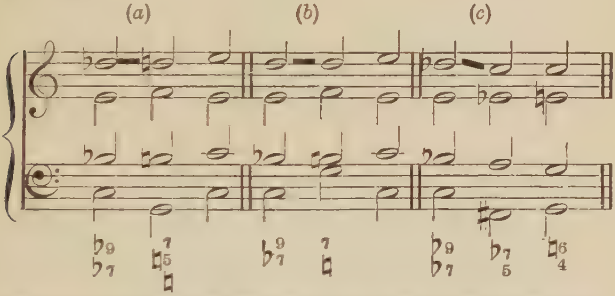

(*c*) Third inversion. (*d*) Fourth inversion.

615. The **tonic ninth** may be resolved like the *dominant and supertonic ninths* while the rest of the chord remains (§ 611).

If resolved on a chord on another root it must be followed by a *dominant discord* or by a *supertonic discord.* The *ninth* then resolves (*a*) by *rising* (when it is the *minor* ninth) a chromatic semitone, (*b*) *remaining* (if the *major* ninth), or (*c*) by *falling* a second.

The notes of this chord up to the seventh are subject to the rules of the tonic seventh (§ 605).

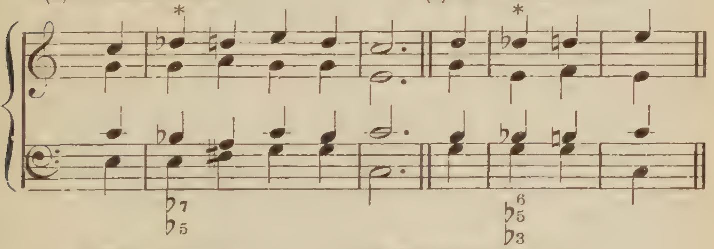
FIG. 307.



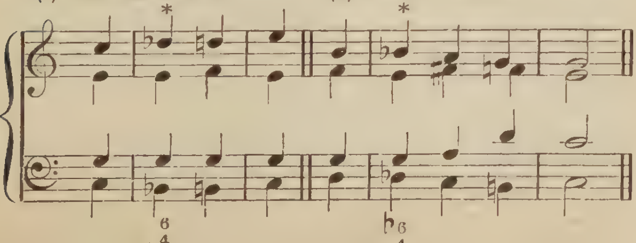
Inversions of the **tonic minor ninth** with figuring are shown below.

FIG. 308.

(*a*) First inversion. (*b*) Second inversion.

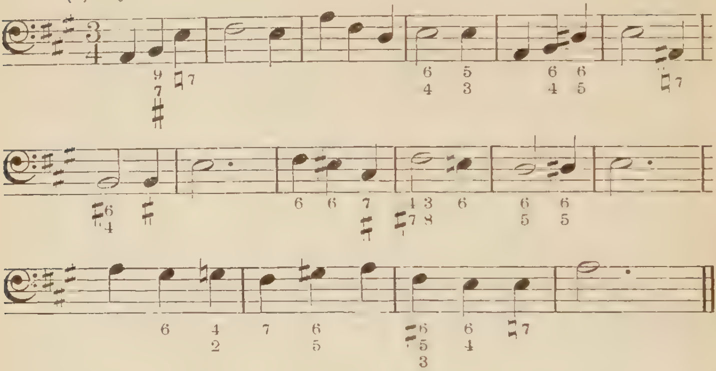


(*c*) Third inversion. (*d*) Fourth inversion.

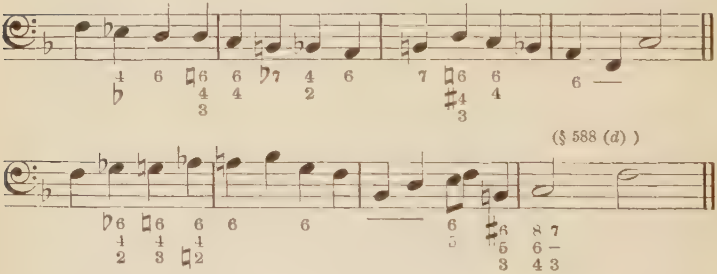


Exercises on Chromatic Ninths.

(*a*) Hymn Tune.



(*b*) Hymn Tune.



(§ 588 (*d*))

Section III.—Chromatic Elevenths and Thirteenths.

616. Chords of the eleventh may be formed by adding a third above the ninths on the *supertonic* and *tonic*. These elevenths (especially that on the supertonic) are so little used that the mere mention of them will suffice here.

617. By adding the thirteenth (minor or major) from the root to the *supertonic* and *tonic* ninth we get the **supertonic thirteenth** and **tonic thirteenth**. In a minor key only the minor form can be used; both minor and major are available in major keys.

618. The thirteenth may *fall* a second, *remain* to be a note of the next chord, or (when it is *minor*) *rise* a chromatic second.

Fig. 309.

Supertonic thirteenths.

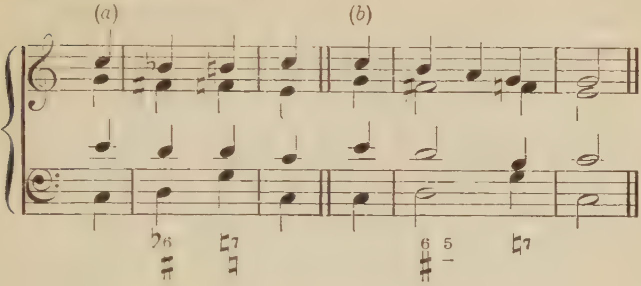
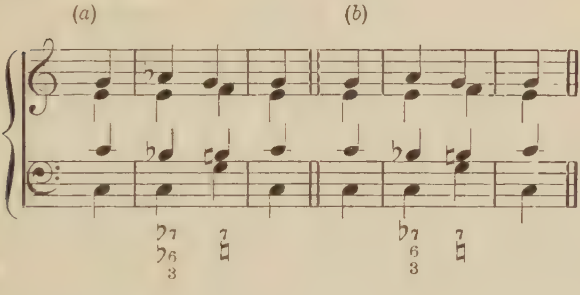


Fig. 310.

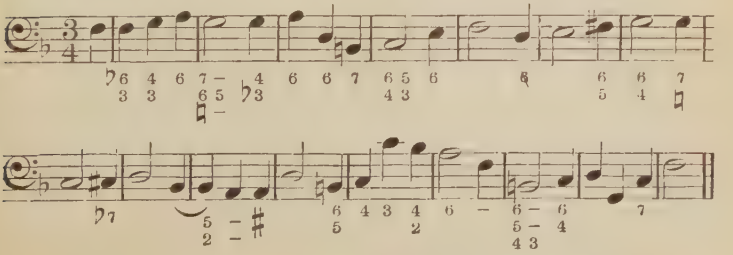
Tonic thirteenths.



Exercise on Supertonic and Tonic Thirteenths.

It will be useful to remember that the *leading-note* is the thirteenth of the supertonic; the *submediant* is the thirteenth of the tonic.

Hymn Tune.



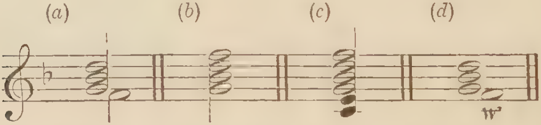
SECTION IV.

Fundamental Discords AND THE **Chromatic Scale.**

619. All fundamental discords are derived from one of three roots—the **tonic,** the **supertonic,** the **dominant.** The order in which the intervals are added in the harmonic series (§ 389) is *major third, perfect fifth, minor seventh, minor* or *major ninth, perfect eleventh, minor* or *major thirteenth.*

620. We have already shown how to find the root of fundamental discords. We give one further example, following the method of § 565. (*a*) is the discord; (*b*) the same arranged in thirds; in (*c*) thirds are added below until the order of interval corresponds to that of a fundamental discord. The lowest note (*c*) is therefore the root.

FIG. 311.



621. This method only tells us the *root.* The resolution of the chord, and the key in which it occurs, will show whether that root is dominant, tonic, or supertonic.

622. The sign w’, called a direct, is sometimes used, as in fig. 311 (*d*), to indicate the root of a chord.

623. The chromatic scale. In Part I., § 175, it was shown that the *harmonic*[1] *chromatic scale* is obtained by lowering the upper of each pair of tones (*e.g.* the note between C and D is called D♭) except that between the fourth and fifth, which is always the raised fourth (F♯ in C). It will be useful to show the appropriateness of this name by explaining how the notes of this form of the scale are derived.

624. If we carried on the harmonic series described in § 389 we should see that, leaving out the octaves of the *generator*, the intervals reckoning from the generator are *perfect fifth, major third* (or tenth), *minor seventh,* and *minor ninth.*

625. Starting from C, and writing these intervals in close order, we get the notes shown in fig. 312 (*a*).

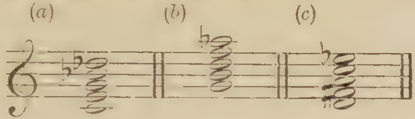
If we begin again, this time taking as generator the first new note in the series from C, *i.e.* G, we get the notes shown at (*b*).

---

[1] The *arbitrary* form is shown in § 176.

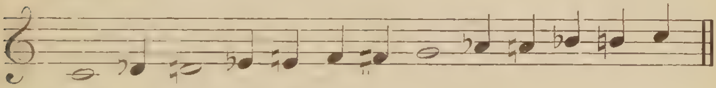
Beginning again with the first new note (*i.e.* omitting octaves of the generator) of G we get the notes shown at (*c*).

Fig. 312.



626. The three generators, *tonic*, *dominant*, and *supertonic* with the harmonics shown above supply all the notes of the *harmonic chromatic scale*.

Fig. 313.



627. The three *roots* are printed as semibreves.

From the **tonic** are derived: E♮ the third; B♭ the seventh; D♭ the ninth.

From the **supertonic**: F♯ the third; A♮ the fifth; E♭ the ninth.

From the **dominant**: B♮ the third; F the seventh; A♭ the ninth.

628. Since the supertonic is thus derived from (*i.e.* is an harmonic of) the dominant, and the dominant from the tonic, it is clear that the whole scale is **derived from the tonic.** We can now give a more complete definition of key.

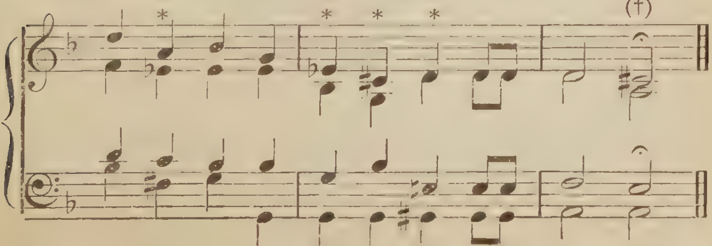
A **key** means a collection of notes, the first of which is called the key-note or tonic, to which key-note the other notes of the series have a certain relation.

Exercise.

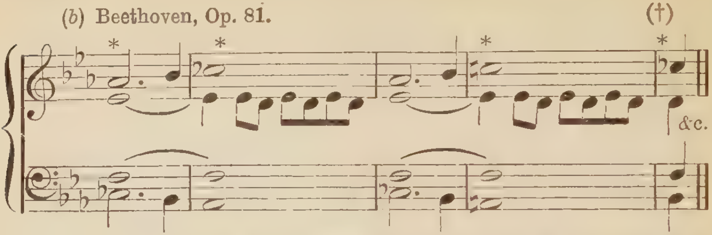
Give the roots of chords marked * and figure them.

Note.—(†) This is the dominant chord of D minor; Mendelssohn's part-writing is very free and abounds in infractions of rules the student should not imitate.

(*a*) Mendelssohn's 'Elijah.'

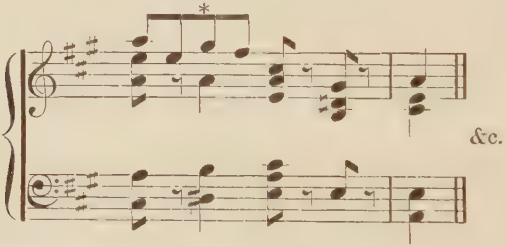


(*b*) Beethoven, Op. 81.

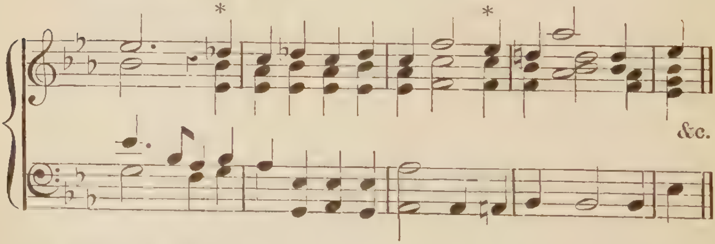


(†) The remainder of the passage not quoted shows that it is in E♭ major.

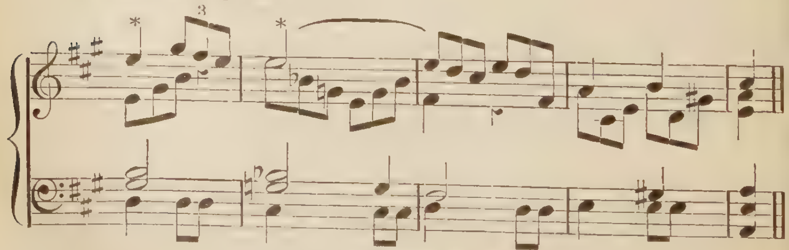
(*c*) Gounod, 'Mirella.'



(*d*) Schumann, Op. 97.



(*e*) Beethoven, Op. 92.



CHAPTER XLVI.

THE AUGMENTED SIXTH.

629. The chord of the **augmented sixth** can be taken on the *minor sixth* and on the *minor second* of both major and minor keys. That on the minor sixth is by far the most frequently used.

630. The chord occurs in three forms:

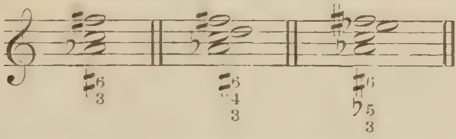
(*a*) The augmented sixth with the third from the bass. This is called the **Italian sixth.**

(*b*) The augmented sixth with the third and fourth from the bass; this is called the **French sixth.**

(*c*) The augmented sixth with the third and perfect fifth from the bass; this is called the **German sixth.**

FIG. 314.

(*a*) **Italian sixth.** (*b*) **French sixth.** (*c*) **German sixth.**



631. There are different opinions among musicians as to the **harmonic derivation** of these chords, but the following is a commonly accepted view. The bass-note (A♭) is considered as the *minor ninth* of the **dominant** (the above examples are in C); the other notes of the chord are derived from the supertonic.[1] The sixth from the bass (F♯, the sharpened fourth of the scale) is the *major third* of the *supertonic*; the *third* (C) is the *minor seventh* of the *supertonic*, while the fourth (D) and fifth (E♭) are respectively the *root* and *minor ninth* of the *supertonic*. Thus the chord is said to be derived from two roots, and it is spoken of as a chord with a **double root.**

632. **Doubling.**—The notes forming the interval of the augmented sixth can never be doubled. The only form in which it is necessary to double a note is the Italian sixth. Here the third is to be doubled.

633. **Resolution.** The augmented sixth on the minor sixth of the scale resolves:

(*a*) On the tonic common chord or one of its inversions.

(*b*) On the dominant common chord or its first inversion.

---

[1] As the supertonic is among the notes derived from the dominant (§ 625), some musicians regard this chord as derived from the dominant only.

(*c*) On an inversion of the dominant minor ninth.

(*d*) On a supertonic discord.

The resolutions (*a*) and (*b*) are the commonest.

634. In resolving, the two notes forming the augmented sixth should not move in *similar* [1] motion with each other. The other notes of the chord proceed as they do when used in the supertonic discords (§§ 602, 612).

FIG. 315.

Italian sixth.

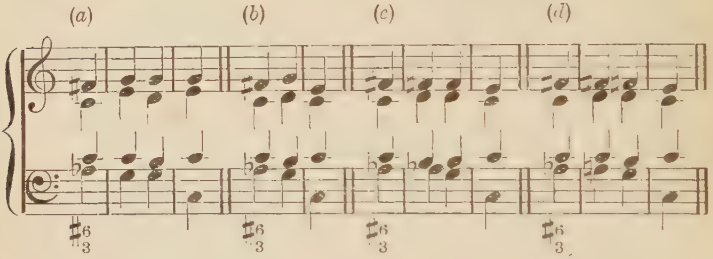


FIG. 316.

French sixth.

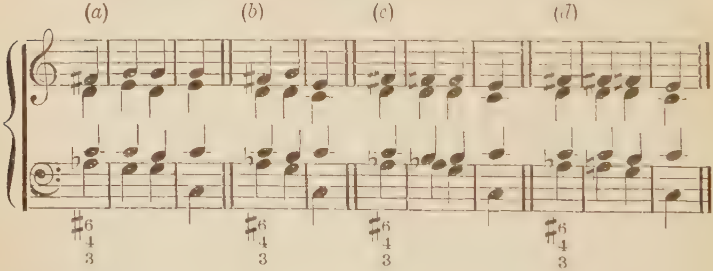
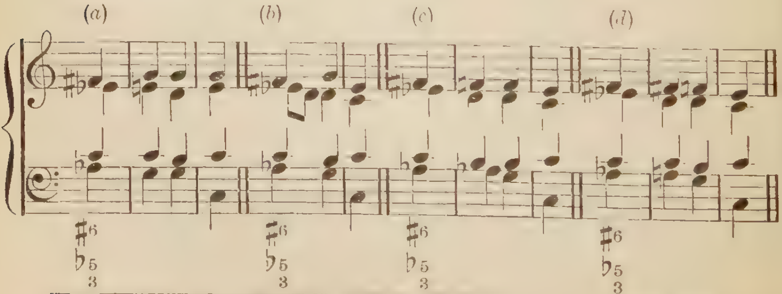


FIG. 317.

German sixth.



---

[1] Exceptions to this will be found in good composers.

635. NOTE.—The German sixth resolving directly on the dominant common chord would produce consecutive fifths. This can be avoided by resolving the fifth (*i.e.* the minor ninth of the supertonic) while the rest of the chord remains as at (*b*) above. In practice this chord usually resolves on the second inversion of the tonic common chord.

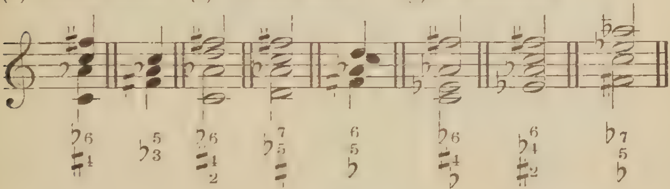
636. **Inversions.** The two notes which form the interval of the augmented sixth are rarely inverted to form a diminished third, except in the case of the German sixth. The other notes of the chords may be placed in the bass, so that there are different forms of inversion corresponding to the different forms of the chord. These are shown in fig. 318, the forms most frequently used being shown in open notes.

It will not be necessary to show the resolutions of these inversions; the constituent notes are subject to the same rules of resolution as in the original forms of the chord.

FIG. 318.

Inversions of the augmented sixth.

(*a*) **Italian** sixth. (*b*) **French** sixth. (*c*) **German** sixth.

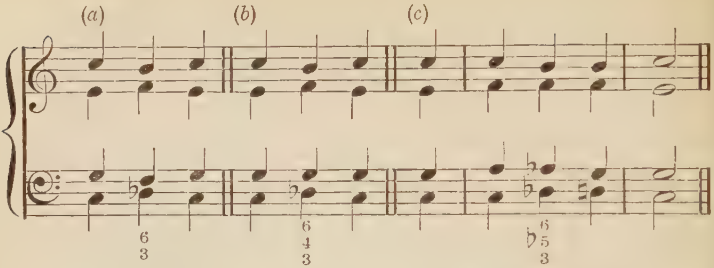


637. The **augmented sixth** on the *minor second* is not so frequently used as that on the minor sixth. It occurs in the same three forms.

It consists of the minor ninth of the *tonic*, with the third and seventh of the *dominant*. To these are added, in the French and German sixths, the root and minor ninth of the dominant respectively. Thus the two roots of these chords are tonic and dominant.

638. With the one exception, that in minor keys this chord may not resolve on the common chord of the tonic, each of the notes of this augmented sixth proceeds in resolving just like the corresponding notes of the augmented sixth on the minor sixth. It will therefore not be necessary to show all possible resolutions.

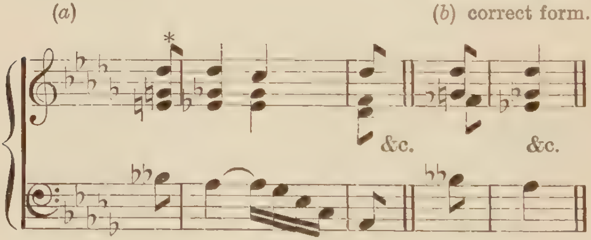
FIG. 319.



639. The chord of the *augmented sixth* is sometimes written inaccurately, one of its notes being written enharmonically for convenience in reading (§ 566). In the example below E♮ is written for F♭ (the minor ninth of the supertonic in D♭ major).

FIG. 320.

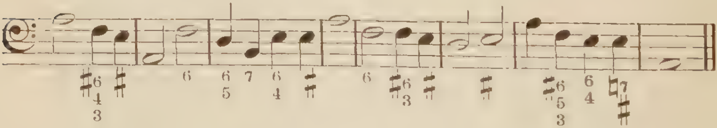
Beethoven, Op. 57.



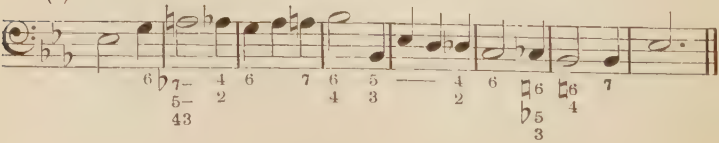
EXERCISES.

Add three upper parts to the following:

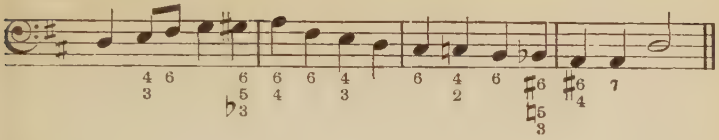
(1)



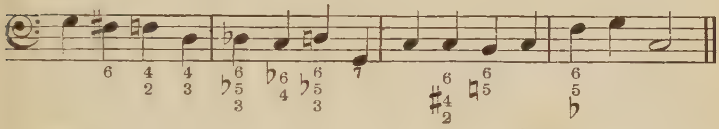
(2)



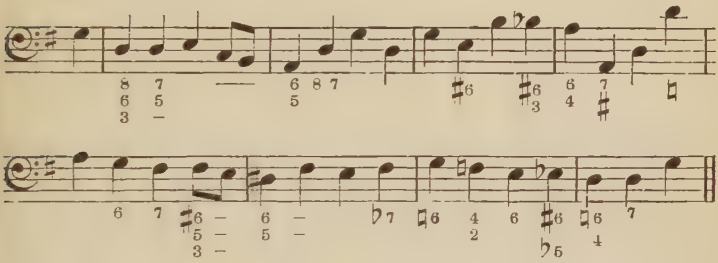
(3)



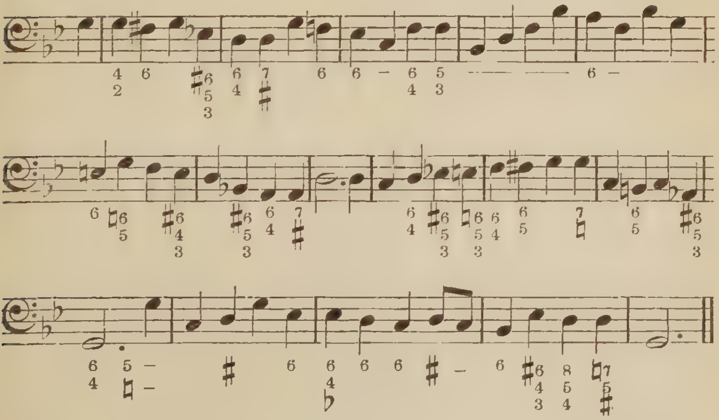
(4)



(5)



(6)



CHAPTER XLVII.

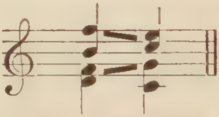
THE DISSONANT TRIADS.

640. If we omit the root from the first inversion of a dominant seventh we get the diminished triad on the leading-note (fig. 151). This is occasionally (though not very often) used. An example will be seen in Beethoven's P.F. Sonata, Op. 78, in the thirty-fifth bar after the double bar.

If this chord is used its origin should be remembered. The only note that can be doubled is the third, the other notes being dissonant.

641. In the first inversion of this triad, *i.e.* the $^6_3$ on the *supertonic*, the third (*i.e.* the original seventh) may be doubled, because the relation of this note to the bass is not now dissonant. If this third is doubled it is best to let the upper of the two thirds fall and the lower rise.

FIG. 321.

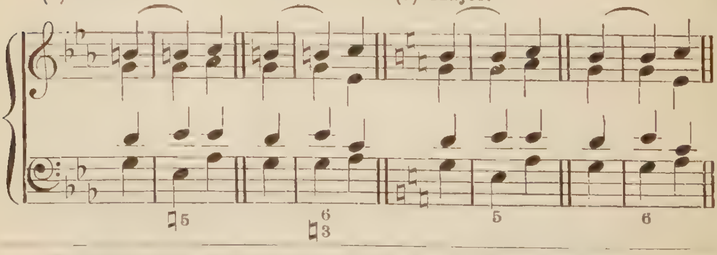


642. The triad[1] on the mediant of a minor key has an **augmented fifth,** and it is therefore dissonant. It may be used in its root position and first inversion. The dissonant note must be prepared and resolved by rising a second. This dissonant triad resolves on a common chord, the root of which is a fourth above the root of the triad (fig. 322 (*a*)).

643. According to some authorities the triad[1] on the *mediant* of major keys is dissonant. It is subject to the same rules of preparation, resolution, and inversion as that on the mediant of minor keys (fig. 322 (*b*)).

FIG. 322.

(*a*) Minor. (*b*) Major.



---

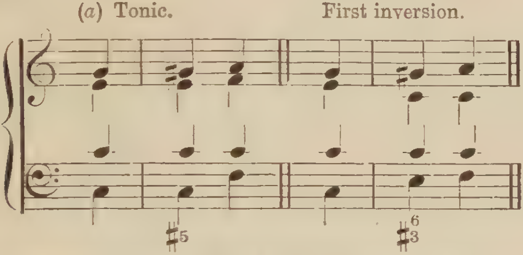
[1] The origin of these chords is the dominant thirteenth (ch. xliii.), and this accounts for the fact that these dissonant triads are not infrequently found in a second inversion. Thus in the triad on the mediant of the minor, the root of the triad (E♭, fig. 322) is the thirteenth of the dominant; the third (G) is the root; the fifth (B♮) is the leading-note.

644. The **augmented triad** on the mediant of minor keys, subject to the rules of § 642, may be used in the relative major keys; thus the *augmented triad* of C minor in E♭ major; that of A minor in C major.

In this case the dissonant note is best approached by step of a semitone.

645. Thus there is an augmented triad [1] on the tonic of major keys.

Fig. 323.

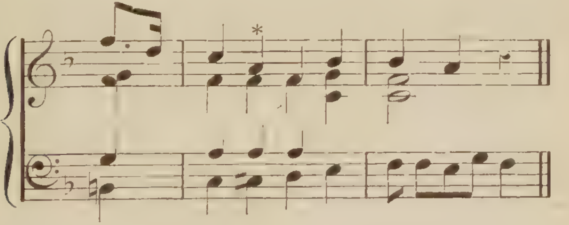


646. An augmented triad, subject to § 642, is also found on other notes of the scale, especially on the *dominant* and on the *subdominant*. Schumann is exceedingly fond of using that on the subdominant.

647. All these augmented triads are occasionally used in the second inversion, as in the following example :—

Fig. 324.

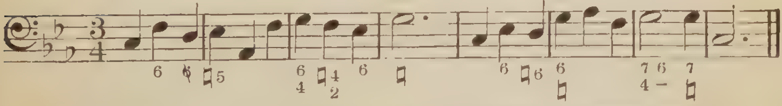
Schumann, Op. 68, No. 30.



EXERCISES.

Add three upper parts :—

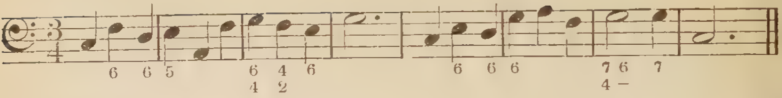
(1)



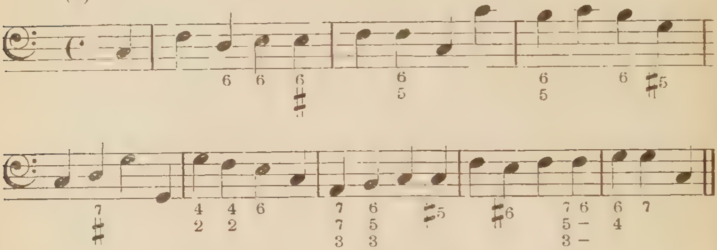
---

[1] This is chromatic in major keys (*v.* p. 219 n.).

(2)



(3)



CHAPTER XLVIII.

PEDAL NOTES, ARPEGGIOS, GROUND BASS.

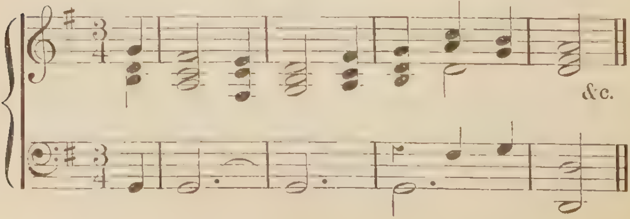
618. A **pedal** is a note sustained through a succession of chords of which the pedal may or may not form a part.

The pedal-note occurs most frequently, though not always, in the bass, and this is probably the origin of the term, the pedal-note being often played by the pedals of the organ. The French and German name for pedal-note is *organ-point*.

619. The only notes which can be used as pedal-notes are **Tonic** and **Dominant**, and of these the latter is by far the more usual.

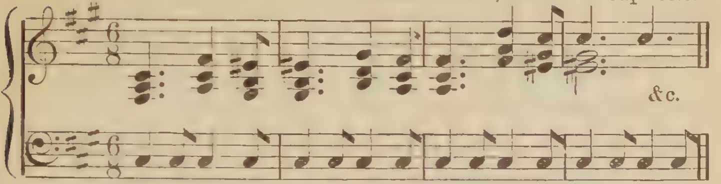
FIG. 325.

(*a*) Example of **Tonic pedal**. Handel.



(*b*) **Example of Dominant pedal.**

Mendelssohn, Scherzo e Capriccio.



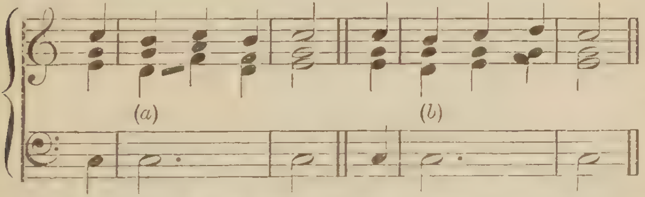
650. A *pedal* passage usually begins with a chord, of which the pedal-note is a part (fig. 325), but it may begin with a chord of which the pedal-note is not a part.

The pedal passage should end[1] with a chord of which the pedal-note forms a part (fig. 325).

651. When the pedal-note does not form part of the chords above it, the next note above the pedal must be considered as the bass, and must follow all rules which relate to the movement of the bass.

Thus at (*a*), fig. 326, the pedal-note is no part of the chord, therefore the note D is the bass of a second inversion which may not leap (§ 344). This is corrected at (*b*).

FIG. 326.



652. **Modulation in a pedal passage.**—The chords used during a pedal passage should only be those—diatonic or chromatic—belonging to the key[2] of the passage.

The only[1] chords foreign to the key which are allowed on a pedal are the major common chord and fundamental discords on the sixth of the major key. These are allowed on a dominant pedal, provided they are followed by a chord containing the seventh of the dominant.

---

[1] There are exceptions to this rule in modern music.

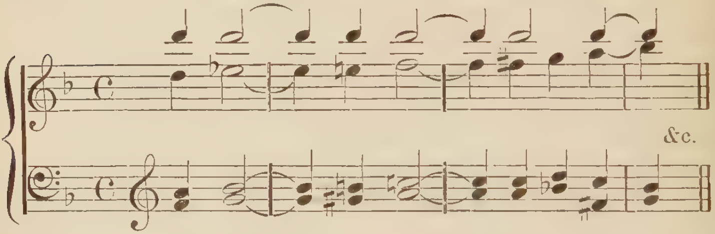
[2] A passage on a dominant pedal may modulate to the key of the dominant, when the pedal becomes the tonic. A passage on a tonic pedal may modulate to the subdominant key, when the pedal becomes the dominant of the new key.

653. In **Figuring** the chords above a pedal the intervals may be reckoned either from the pedal-note or from the part next above the pedal-note.

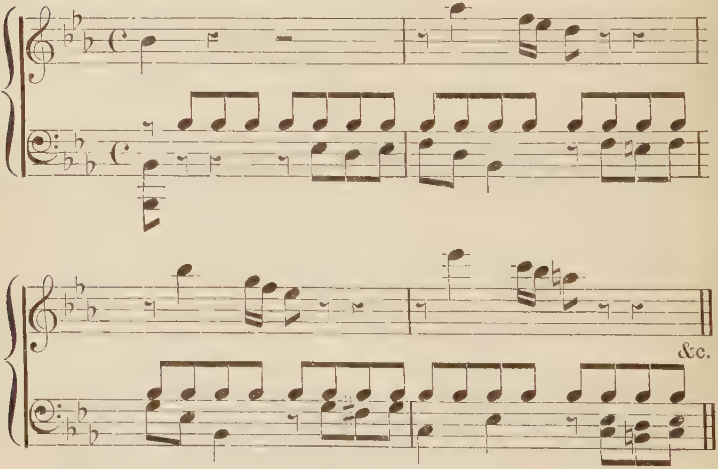
654. **Inverted Pedal.**—The pedal-note may be sustained in an upper part; it is then called an inverted pedal.

Fig. 327.

(*a*) Pedal in the highest part. Beethoven, Op. 31, No. 2.



(*b*) Pedal in middle part.[1] Beethoven, Op. 12, No. 3.



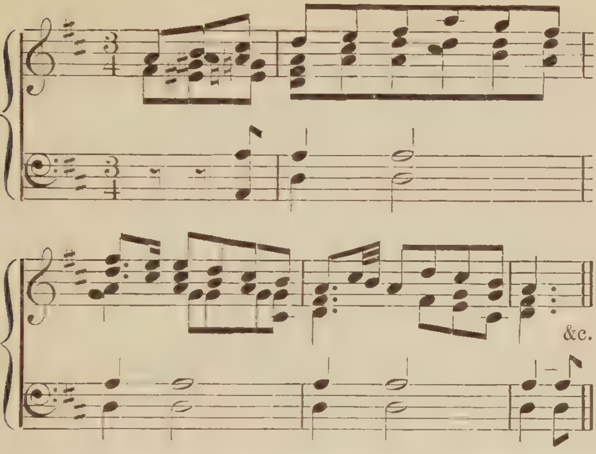
655. **Double Pedal.**—Sometimes both dominant and tonic are sustained together, in which case the tonic must be below the dominant.

---

[1] To this extract there is a violin part (not given).

Fig. 328.

Mendelssohn, S.w.W. 35.



656. Brahms (*Deutsches Requiem*) has a whole movement constructed on a tonic pedal. Haydn (*Trio* in *Clock Symphony*) repeats the tonic common chord exactly in the way of a pedal, while a solo implying chords of which the sustained notes form no part is given out by the flute.

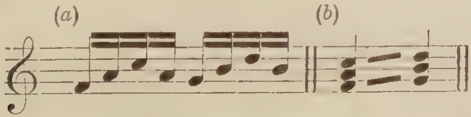
657. A pedal-note is sometimes ornamented by being alternated with an auxiliary note. There is an example of this in Beethoven's P.F. Sonata vii., beginning at the eighteenth bar from the end of the first movement.

658. When the notes of a chord are played in succession instead of being struck all at once, the chord is called an **arpeggio** (§ 223).

Arpeggios in succession are not allowable unless the succession of chords from which they are derived is allowable.

(*a*) is incorrect, because the chords which the arpeggios represent have consecutive fifths (*b*).

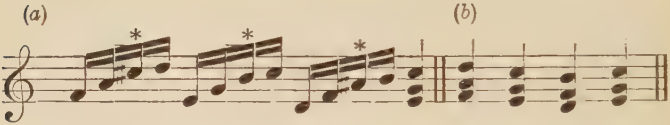
Fig. 329.



659. Auxiliary notes may be used with the essential notes of an arpeggio.

The arpeggios at (*a*) are derived from the chords at (*b*). The notes are auxiliary.

FIG. 330.

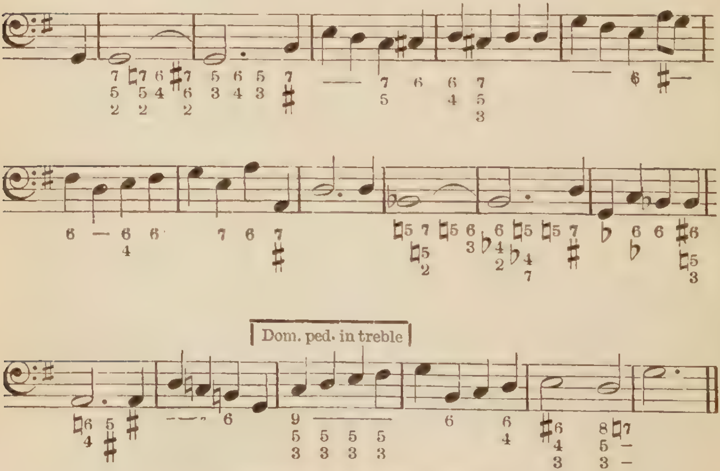


660. **Ground Bass.**—Sometimes a bass part is repeated several times, having at each repetition different harmonies or the same harmonies varied by suspensions or passing notes &c. A bass so repeated is called a *Ground Bass.*

Many whole movements, especially of the time of Bach and Handel, were constructed on a ground bass. An example will be seen in the chorus *To Song and Dance*, No. 66, Handel's *Samson*, where a phrase of two bars is repeated twenty-one times.

EXERCISE.

Add three parts to the following :—

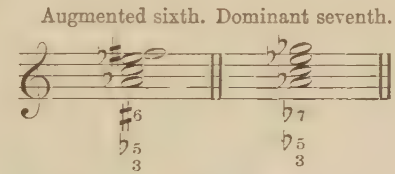


CHAPTER XLIX.

MODULATION—*continued.*

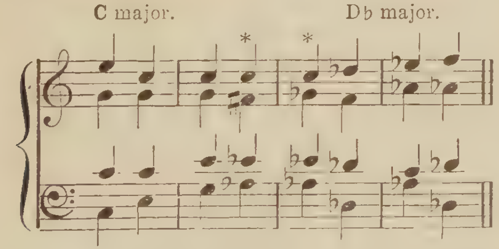
661. We have already drawn attention to the use made of the *diminished seventh* in enharmonic modulation. This is by no means the only chord so used. Another chord specially adapted for enharmonic modulation is that form of the augmented sixth called the **German sixth**, which can be enharmonically changed into a dominant seventh.

FIG. 331.



662. It will readily be seen that this chord may be approached in one key, as an augmented sixth (*e.g.* in C), and left as a dominant seventh (*e.g.* in D♭), and thus we get an extraneous modulation from C to D♭.

FIG. 332.

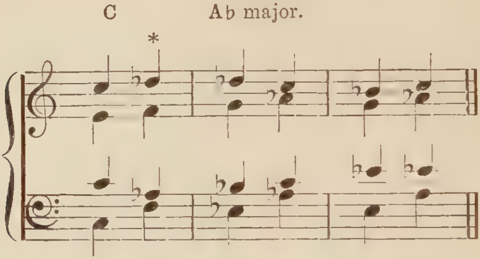


663. This same chord (fig. 332) might be the augmented sixth on the minor second of G, and then we should get a modulation from G major to D♭ major. Again, the augmented sixth is the same in minor and major keys, and so is the dominant seventh. The above examples, then, might be from C major or minor to D♭ major or minor, &c.

664. Any of the chromatic concords §§ 595–599 may be approached as chromatic in one key, and left as diatonic chords

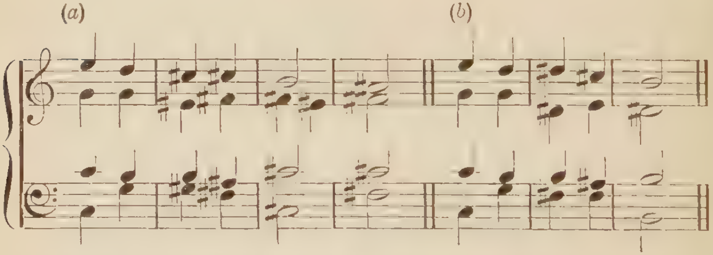
in a new key, *e.g.* the Neapolitan sixth in C (major or minor) may be left in the key of A♭ major, &c.

FIG. 333.



665. Any *major common chord* in a key may be considered as the chromatic common chord on either the *minor second* or *minor sixth* (§§ 597, 599), and left accordingly.

FIG. 334.



At (*a*) the dominant of C is left as the chromatic common chord on the minor second of F♯. At (*b*) the same chord is left as the chromatic common chord on the minor sixth of B.

665*a*. By enharmonic change (§ 570) any *chord of the diminished seventh* may be resolved as if derived from four different roots, producing modulation into four major and four minor keys. Each of these four roots may be regarded as the **dominant**, **supertonic**, or **tonic** (§§ 611–15) of a key. Therefore each of the chords shown in fig. 284 may be resolved in three major and three minor keys. Thus from any *diminished seventh* we can modulate into any of the twelve major or twelve minor keys.

666. The methods described in §§ 662–5 all produce *extraneous modulation*. Another very common method is to take one of the notes of a

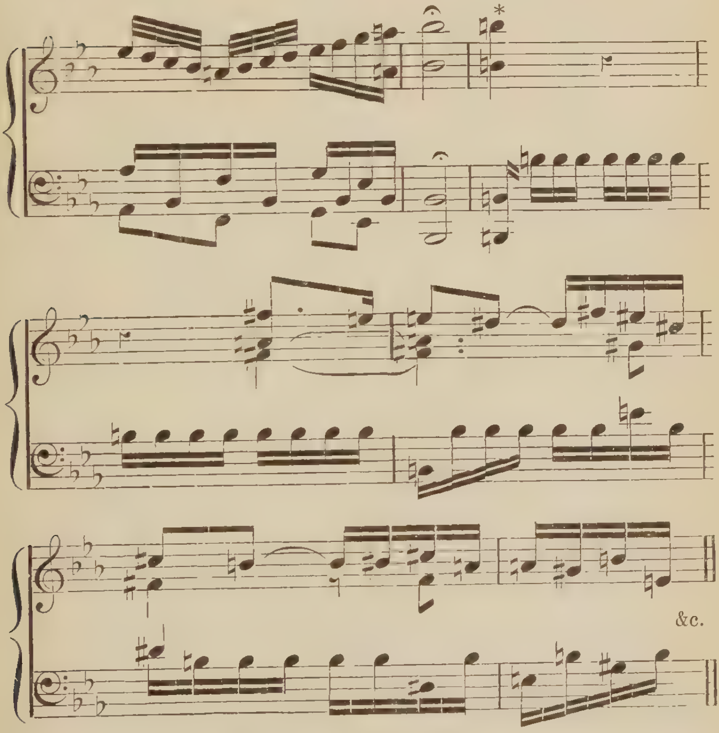
common chord in a key and leave it as one of the intervals of either the tonic common chord or the dominant seventh of the new key. See below, fig. 335.

667. Sometimes an extraneous modulation is produced by passing through a series of keys, each key being related to that immediately preceding, *e.g.* C, G major, G minor, B♭ major, B♭ minor, D♭ major. Thus eventually we modulate from C major to D♭ major, an extraneous modulation. Such a modulation is sometimes called a **compound modulation** (fig. 336).

668. The methods of modulation are innumerable, and the best way of studying them is to go to the works of the best composers. We conclude with two examples of extraneous modulation.

Fig. 335.

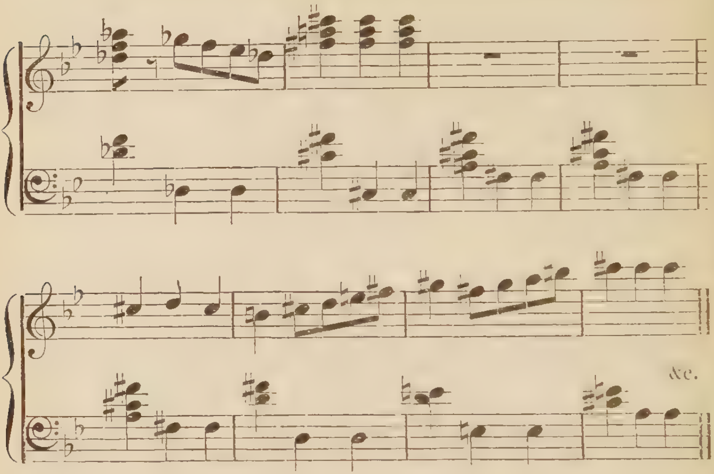
Beethoven, Op. 7.



At * the leading-note of C minor (the extract opens in E♭ major) is treated as the root of the dominant seventh in E major.

FIG. 336.

Schubert, Post. P.F. Sonata in B♭.



We have here a modulation from D♭ through G♭ minor (here enharmonically shown as F♯ minor) to A major.

EXERCISES.

1. By means of the German sixth treated enharmonically modulate (*a*) from G minor to A♭ major, (*b*) from F major to G♭ minor.

2. By § 664 modulate (*a*) from B♭ major to G♭ major, (*b*) A major to F major.

3. By §§ 665–6 modulate from D major (*a*) to F♯ major, (*b*) to C♯ major (*c*) to E♭ major.

CHAPTER L.

HOW TO HARMONISE A MELODY.

SECTION I.

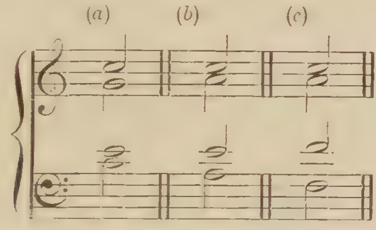
669. In harmonising melodies the process followed in filling up a figured bass is reversed. We have now to find a suitable chord as the accompaniment of a given note, and a suitable series of chords which can follow each other.

670. It will be convenient to begin our exercises in this subject by confining ourselves to the use of **common chords**.

671. We saw in § 351 that the common chords of a key are made up out of the notes of that key. Therefore every note of a diatonic scale may be harmonised as a part of some common chord.

672. But each note can occur in more than one common chord, *e.g.* C may be (*a*) the root (or octave) of the *tonic*; (*b*) the third of the *submediant*; (*c*) the fifth of the *subdominant*.

FIG. 337.



673. Each note, then, can be harmonised in three different ways, and we must now learn how to find out which to use.

674. Of the common chords and triads in major keys all are of common occurrence except the *mediant common chord*, and the *leading-note triad*. In harmonising melodies the student will do well to avoid these altogether, at any rate at the beginning. We propose, then, **to use only the common chords on the first, second, fourth, fifth, and sixth degrees of the scale.** This relieves us of some of the greatest difficulties, *e.g.* the leading-note is not to be harmonised as the fifth of the mediant, nor as the root of the triad on the leading-note, for we do not intend to use those chords. Therefore, for the present, the **leading-note must be treated as the third of the dominant triad.**

675. The other common chords can be used in any order, but the common chord on the supertonic followed by that on the tonic, and the common chord on the dominant followed by that on the subdominant, should be avoided.

676. **The beginning of a melody.**—Many melodies begin with the *tonic common chord*, and usually the tonic (*i.e.* C in the key of C) is the first note, although the first note may be the third (*i.e.* E) or even the fifth (*i.e.* G) of the chord. Some melodies begin with the *dominant chord*, and then the first note may be the root (*i.e.* G), or the third (*i.e.* B), or the fifth (*i.e.* D) of that chord.

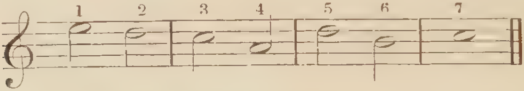
A melody may begin on any note of the scale, but the beginnings described above are the most usual, and those which a student is most likely to meet with at first.

677. **The end of a melody.**—All melodies *must* end with the *tonic common chord*, and **the last bass-note must be the tonic.** The last note of the treble may be the *tonic*, or the third, or (very rarely) the fifth.

Practically all melodies end with the **perfect cadence**, and consequently the last chord but one will be a *dominant chord* (§ 454).

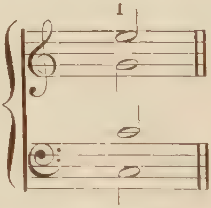
We will now apply these principles to the following melody :—

FIG. 338.



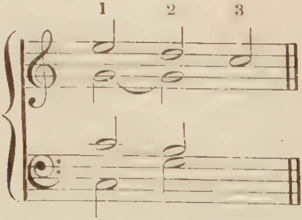
678. As most melodies begin with a tonic chord, E is evidently the third of a chord on C. We therefore use a tonic chord, taking care to arrange the parts carefully. It is usually best to double the root, so we will begin with the following, which has the merit of an even distribution :—

FIG. 339.



679. The next note of the melody is D. D may be the root of a chord on D, the third of a chord on B (best avoided), or the fifth in a chord on G. Which shall we choose of the two that are equally good? It is rarely good to use a common chord on the tonic and then immediately one on the supertonic, so we select the dominant chord. In writing the next chord, which will consist of G, B, D, we must remember that B is the leading-note, and must on no account be doubled. Also that, as G belongs to chords 1 and 2, it will be best to keep it in the same part. Thus :—

FIG. 340.

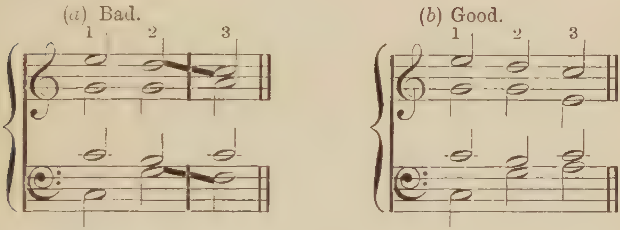


With the exception of the bass, each part moves without leaping.

680. Note, No. 3, C, may be the root of C, third of A, or fifth of F. It *cannot be the fifth of F* here, because, as G was the last bass-note, this would give us consecutive fifths between treble and bass as at (*a*); and to make it a part of the chord on C would be simply repeating No. 1, which would be monotonous. Let us treat it then as the third of a chord on A.

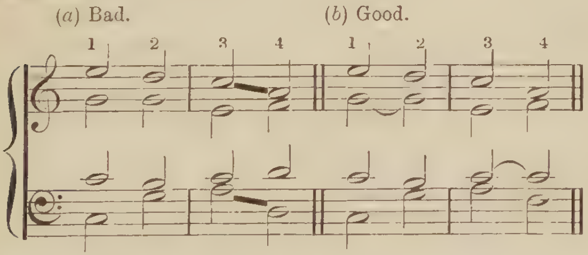
In moving to the next chord several points must be looked to; the bass goes to A. Clearly, then, the alto G can*not* go to A, or we shall get consecutive octaves. The alto goes to E, and the leading-note, which *ought to rise*, goes to C.

FIG. 341.



681. No. 4 may be the root of a chord on A; the third of one on F or the fifth of one on D. We reject the first because we have used that chord in No. 3. We reject the last because the bass would naturally fall, and we should have hidden fifths as at (*a*). We therefore use the chord on F (*b*).

FIG. 342.

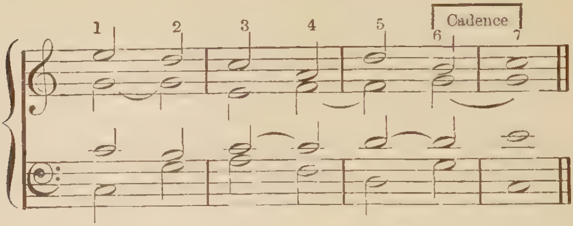


682. No. 5 may be root of D; third of B (to be avoided); fifth of G. It cannot be the last here, because, as the preceding bass-note is F, that would cause hidden consecutives. It must, then, be the first.

No. 6 and 7 we know, from § 677, belong to dominant and tonic respectively, because they are in the cadence.

The whole melody then stands as below:—

Fig. 343.



683. Note that chord No. 5 has no fifth. The reason is clear: the treble A cannot remain, for the melody goes to D; F cannot be omitted because it is the third of the chord, and the tenor C cannot go to A because that would cause consecutive fifths with the bass.

684. Note. In harmonising melodies, of course, all the rules of part-writing and doubling must be followed, and advantage should be taken, when possible, of a note common to two chords, as between 1 and 2; 3 and 4 (fig. 343).

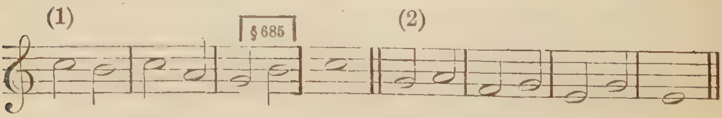
685. As far as possible, variety should be sought. If the same chord is used twice, variety may then be secured by letting some of the parts move as in fig. 136.

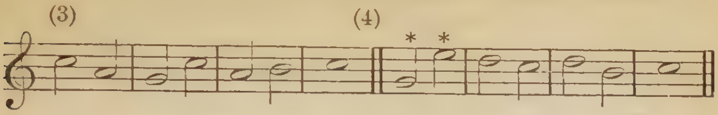
686. The student who means to succeed in harmonising melodies **must acquire the difficult art of mentally hearing what he writes.** With this in view the student is advised to play over many of the good hymn tunes which he will find in almost any hymnal. He will thus get accustomed to *good successions of chords*, and gradually acquire that power of hearing we have spoken of.

687. When harmonising a melody it is a good plan to **write the bass first**, for it is comparatively easy to mentally hear a melody and its bass at the same time. When a good bass is obtained it will rarely be difficult to fill in the parts. In distributing the notes of the chords used, the *treble* and *alto* and the *alto* and *tenor* should never be **more than an octave apart.**

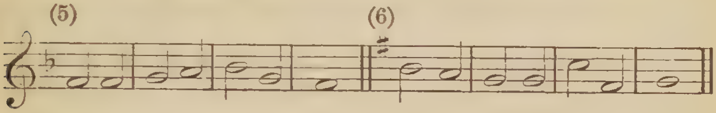
Exercises.

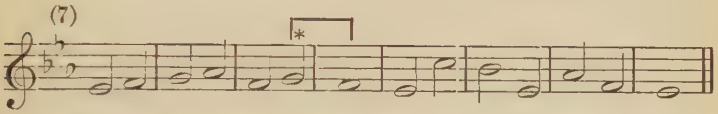
Harmonise the melodies, using only common chords.





* Use the *tonic common chord* in both cases, and to avoid monotony let the bass leap an octave, and remember § 291.





* Read Chapter XXXVI. especially § 461 ; make G part of the tonic chord ; F part of the dominant.

SECTION II.—**Using Common Chords and Inversions.**

688. In using **first inversions** remember that very often—though not always—the sixth is in the upper part. As a $^6_3$ can occur on every note of the major scale, every note of a melody *might* be the upper part of a $^6_3$. This would be too monotonous, and we must seek variety by mingling chords and inversions.

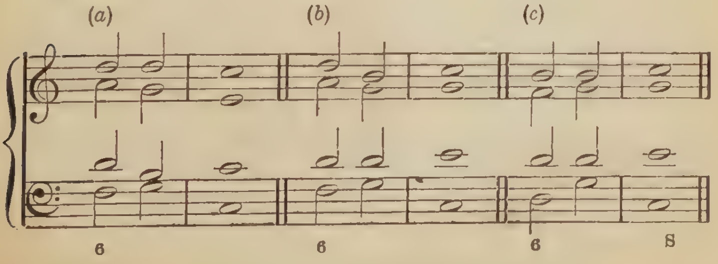
The first inversions most used are perhaps that on the third of the scale and that on the fourth.

689. Notice that the leading-note may now belong to the dominant common chord or to a first inversion on the supertonic (fig. 344 (*c*)).

690. When the same note occurs twice in the same bar it can often be harmonised with a common chord, and then a first inversion of the same chord, or *vice versa*. This is often the case, too, when the melody leaps a third up or down.

Learn by heart the following cadences, and transpose them into other keys :—

FIG. 344.



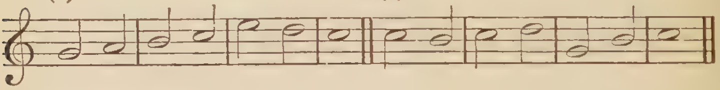
691. **Second inversions** afford such opportunities for error that the student is advised to use them at first **only** in cadences, or in cases like fig. 171, where the *bass proceeds by step.* Learn by heart the examples in figs. 165–171, and transpose to other keys.

EXERCISES.

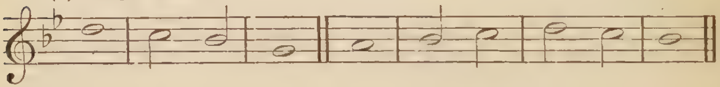
Harmonise, using common chords and inversions; figure the bass.

⁂ *Before doing this exercise do those in Section I. again, now using first inversions as well as common chords, and then compare with the previous harmonising.*

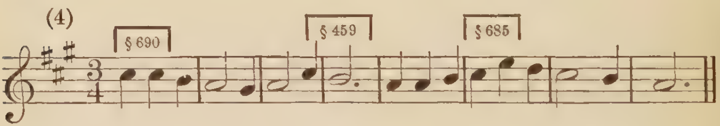
(1) (2)



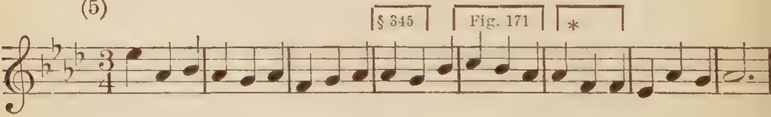
(3) Single chant.



(4)



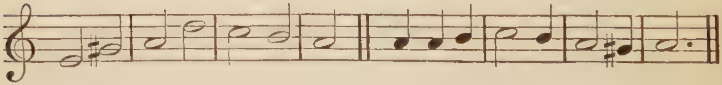
(5)



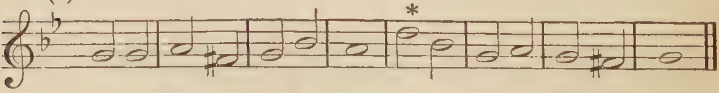
* Use the same chord throughout this bar (§ 685).

SECTION III.—Melodies in the Minor.

(1) (2)

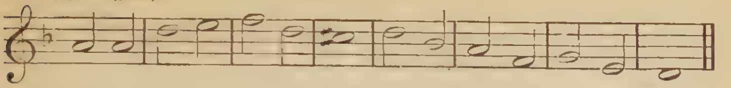


(3)



* Make this the sixth of a first inversion.

(4) (§ 369)

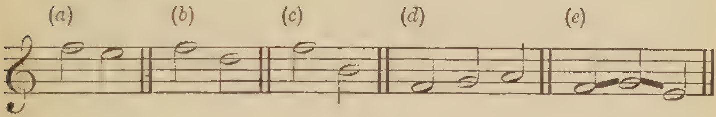


Section IV.—Using the Dominant Seventh.

692. Each of the notes forming the dominant seventh may be in the treble, and so treated provided the chord can resolve properly.

(α) Examples of the seventh of the dominant in the melody.

Fig. 345.



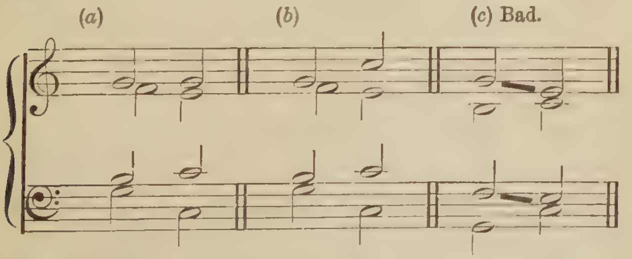
At (*a*), (*b*), (*c*), the note F could be harmonised as part of the dominant seventh, for at (*a*) it resolves regularly, and at (*b*) and (*c*) it merely goes to other notes of the same chord. In (*b*) and (*c*) both notes would have the same chord or an inversion.

At (*d*) F could *not* be part of a dominant seventh because it rises, and therefore does not resolve.

At (*e*) F may be part of the dominant seventh, because it eventually goes to E, and is therefore an example of ornamental resolution.

693. (β) If the dominant is in the melody it can be part of the dominant seventh when it is repeated or when it leaps to the tonic, but not **when it falls to the third**, for that would break the rule given in § 379. Thus:

Fig. 346.



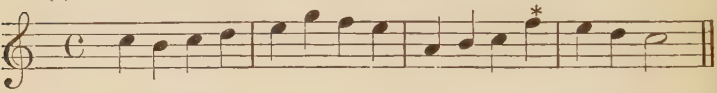
It will scarcely be necessary to show examples of the third and fifth of the dominant in the melody.

EXERCISES.

Harmonise, using dominant sevenths or inversions as well as common chords and inversions.

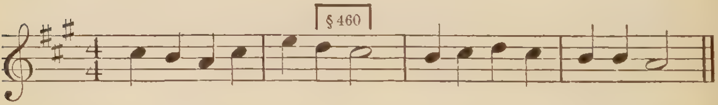
⁂ *Do Sections I. and II. again, now using the dominant seventh, and compare with former setting.*

(1)

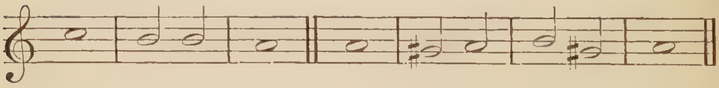


Although the F resolves correctly, do not use a dominant seventh because the cadence in the next bar is clearly $^{6}_{4}\,^{7}_{3}$, and that will necessitate the dominant in the bass for those chords. It is almost always bad to use on the last beat of a bar the same bass-note as that of the following bar.

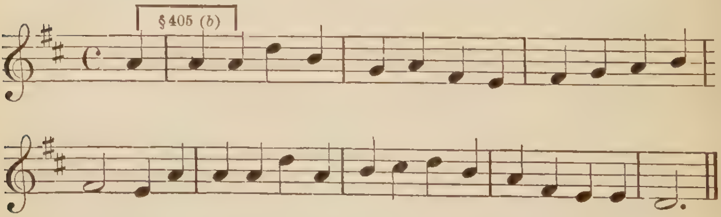
(2)



(3) Single Chant.



(4)



694. **Middle cadences.** We have shown in Chapter XXXVI. how cadences are used, and to complete the subject we must explain further the nature of middle cadences. Generally speaking, each phrase of a melody should end with a different cadence, and, of course, the perfect cadence must be reserved for the final one. But for a perfect cadence to have the complete effect of

a full close (*a*) both the chords of the cadence must be in their root position; (*b*) the tonic chord should occur on the strong accent; (*c*) the tonic chord should have the root (*i.e.* the key-note) in the treble. When none of these conditions are satisfied, a perfect cadence may be used in the middle cadences.[1]

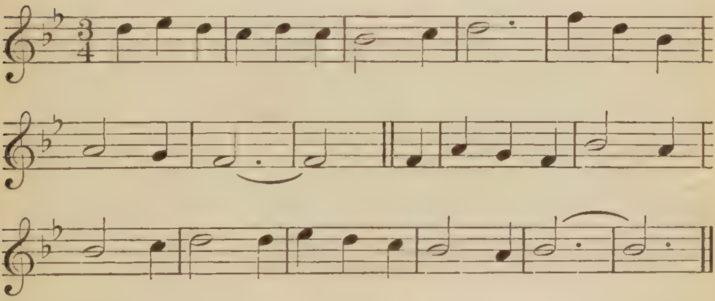
695. Further, most melodies of any length modulate (Chapter XXXVIII.), and when that is the case *a perfect cadence in the new key* is necessary to mark the modulation. With these exceptions middle cadences will usually be *imperfect* or *interrupted.*

696. The student should now analyse hymn tunes with regard to their cadences.

Thus the tune *Rockingham* in E♭ consists of four sections. Section I. ends on the tonic chord, but the treble has the dominant (B♭), and the preceding chord is not the dominant, thus it is not a perfect cadence. Section II. ends on the imperfect cadence. Section III. has a perfect cadence because it modulates to B♭, and, of course, Section IV. ends with a perfect cadence in E♭.

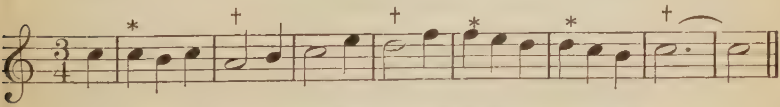
SECTION V.—**With Modulation.**

Read Chapter XXXVIII.



SECTION VI.—**With Suspensions.**

(1)

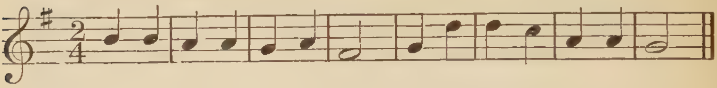


* Suspension in the treble. † Suspension in inner part.

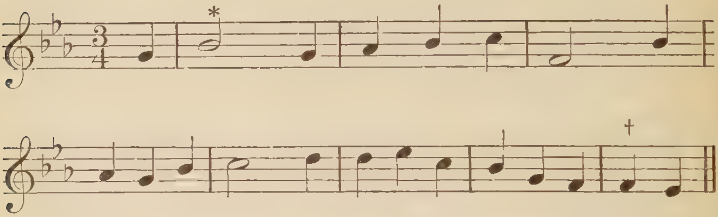
---

[1] Not infrequently the first section of a hymn tune has a perfect cadence with all the conditions of § 694. The probable reason is the importance of establishing the original key in a short piece which modulates.

(2)



(3)

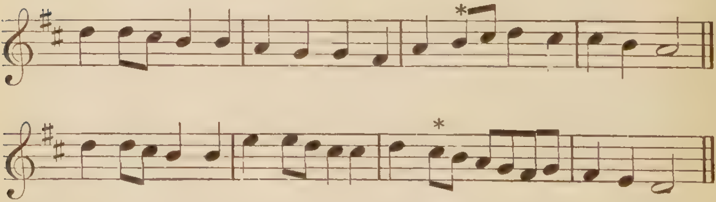


* Suspension in the bass. † Triple suspension.

SECTION VII.—**With Passing Notes.**

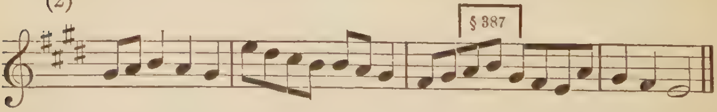
Passing notes to be introduced into any part.

(1)



* Accented passing note.

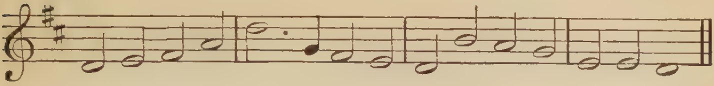
(2)



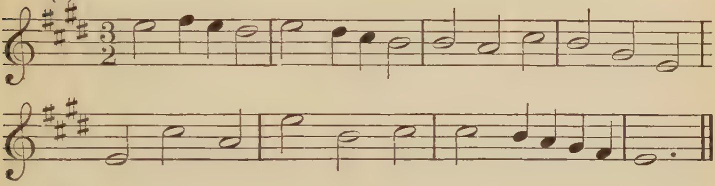
SECTION VIII.—**Miscellaneous Examples selected from Examination Papers.**

Any chords may be used, and opportunities should be sought for using the ninth, eleventh, thirteenth, and chromatic chords, with suspensions and passing notes.

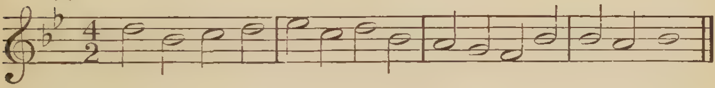
(1)



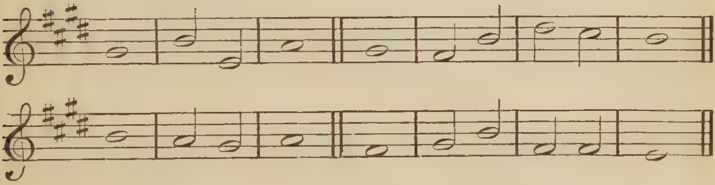
(2)



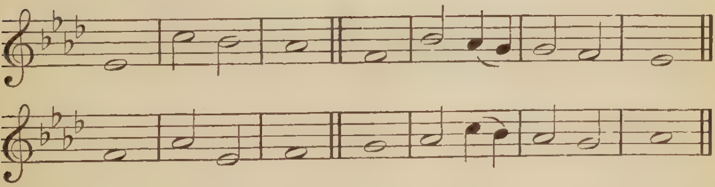
(3)



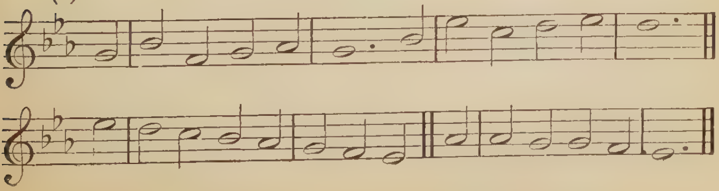
(4) Double Chant.



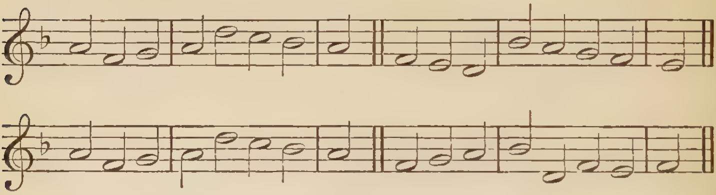
(5) Double Chant.



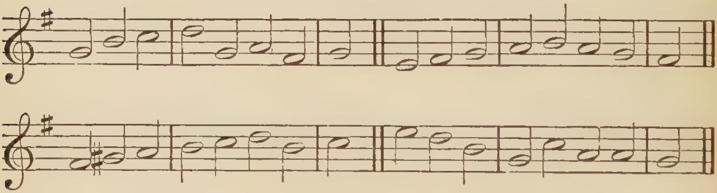
(6)



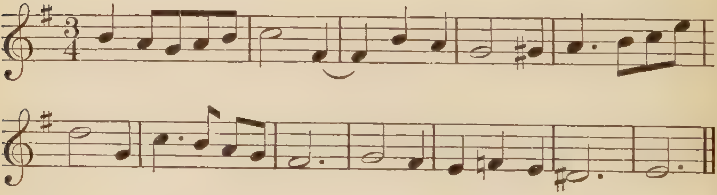
(7)



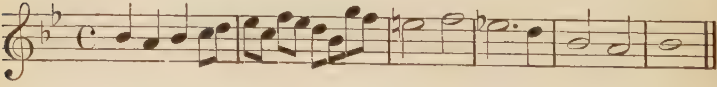
(8)



(9)



(10)



COUNTERPOINT.

CHAPTER LI.

INTRODUCTORY.

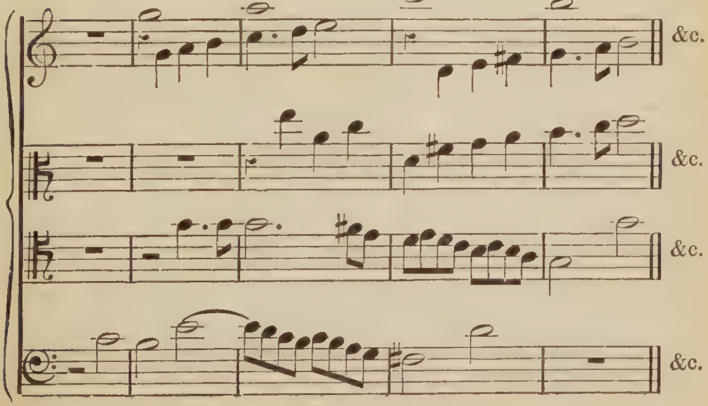
697. **Counterpoint** has been defined as 'the art of combining melodies,' *i.e.* the art of adding one or more melodies above or below a given melody in such a way that the whole when heard together shall produce a satisfactory effect.

The word is derived from the Latin *punctum contra punctum.* In ancient music, notes, from their shape, were called 'points.' Thus, to write one note against another was to write *punctum contra punctum.*

698. The precise meaning of *Counterpoint* will be best seen by comparing it with *Harmony.* In harmony we are mainly concerned with the construction and relation of chords, troubling little about the individuality of each separate part. In counterpoint, on the contrary, while the harmonic basis must be clear and definite, it is imperative that each separate part or voice shall have a melodic interest in itself. Thus, in the following example, each of the five parts has a separate and well-defined melody, which is interesting in and for itself.

FIG. 347.

Mozart, Jupiter Symphony.



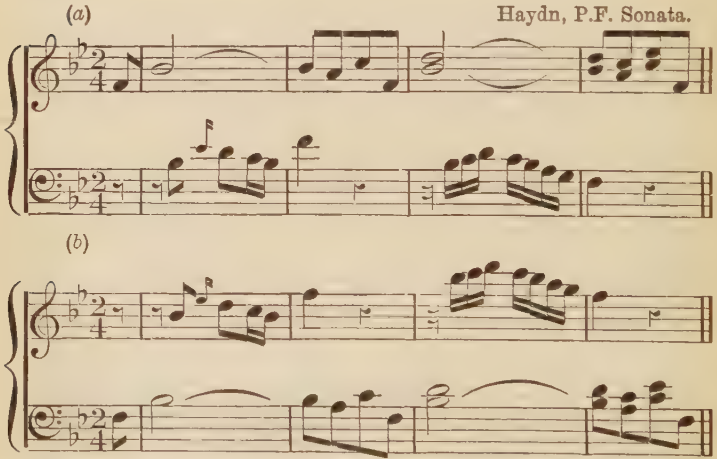
699. It is usual to practise counterpoint by writing melodies or parts *above* and *below* a given melody called the **subject** or the **canto fermo.**[1]

700. If a melody added to a subject only sounds satisfactory when heard in the position in which it is written, *i.e.* either above *or* below the subject, it is said to be in **simple counterpoint.** This is usually the case.

701. A melody, however, may be added to a subject in such a way that it sounds satisfactory both when heard above *and also* when heard below the subject, and such a melody is said to be in **double counterpoint,** fig. 348.

It will be seen that *double counterpoint* means *invertible* counterpoint.

Fig. 348.



Haydn, P.F. Sonata.

702. When *three* (or *four*) parts are written so as to be invertible they are said to be in *triple* (or *quadruple*) counterpoint.

In fig. 347 we have an example of *quintuple counterpoint,* the five melodies there used being invertible.

703. Counterpoint was practised before Harmony. Indeed, when a certain advance in musical knowledge had been made in the study and practice of Counterpoint, Harmony stepped in and systematised that know-

---

[1] In the early attempts at writing music it was customary to select some well-known air or church hymn tune and to add parts to it, making it, as it were, the foundation of the music. This air was called the **Canto Fermo,** *i.e.* **fixed song** or **Plain Song.** This was sung or *held* (Latin, *teneo*) by the *Tenor* (*v.* § 246).

ledge from the point of view of the construction of chords, and Harmony has ever since continued and is still continuing to add fresh advances. The first attempts were very tentative, and writers of counterpoint limited themselves by very strict rules, especially as regards what combinations should be used.

704. When counterpoint is written according to the old rules and restrictions it is called **strict counterpoint.** When music, not bound by the rules of strict counterpoint, but written with all the resources of modern harmony, also gives an individuality to each separate part after the methods of counterpoint, it is said to be in **free counterpoint.**[1]

705. It is of the highest possible advantage for the student of music to practise counterpoint, and to practise it *bound down by the rules which regulated early counterpoint.*

The student is urged to accept this statement with the assurance that did space permit, it might be amply proved and made clear to him.

CHAPTER LII.

LAWS OF PROGRESSION.

706. Many of these laws are exactly like those given in harmony, but they are repeated here for the sake of completeness.

Melodic Progression.

707. When a part moves by *step* (either tone or semitone) it is said to move by **conjunct** movement; when a part proceeds by *leap* it moves by **disjunct** movement.

708. No part may proceed by an *augmented* interval except in one of the repetitions of a sequence.

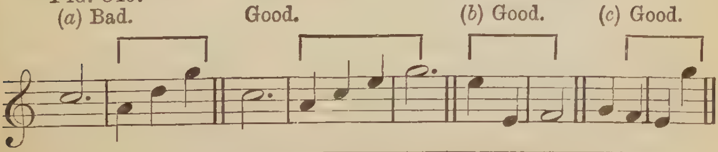
709. When a part proceeds by a *diminished* interval it must at once return to some note within that interval (§ 431).

710. No part may leap a seventh or a ninth.

711. The interval of a seventh or a ninth may not occur in any part without at least two intervening notes (*a*).

Exceptions: a seventh with an eighth intervening (*b*); or a ninth with a tenth intervening (*c*).

Fig. 349.

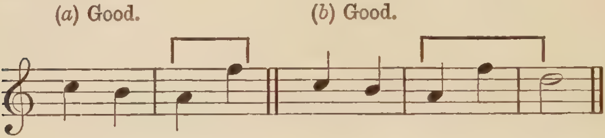


---

[1] Music written in this way is often called *contrapuntal.*

712. *Before* a leap of an interval greater than a fifth it is best to proceed in a direction contrary to the leap (*a*). *After* a leap of an interval greater than a fifth, it is best to return to a note within the leap (*b*).

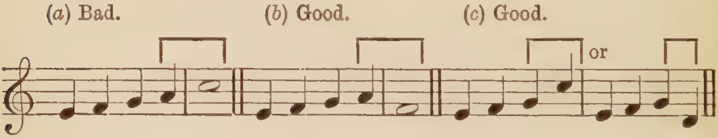
Fig. 350.



713. After moving by several successive seconds a part may not leap *in the same direction* to an accented note (*a*) ; but it may leap to an accented note *in the contrary direction* (*b*).

If the leap is to an unaccented note the part may leap either in the same or in contrary direction (*c*).

Fig. 351.



Harmonic Progression.

714. No parts may move in perfect fifths, octaves, or unisons, §§ 434–437.

715. No upper part may move in fourths with the bass (§ 442).

716. Hidden fifths, octaves, and unisons are forbidden between the extreme parts, except in moving to another position of the same harmony (§ 440).

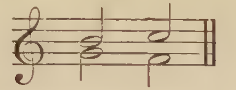
717. Hidden fifths and octaves should be avoided when possible, even in the inner parts or between an inner and an extreme part. They are least objectionable when one of the parts moves by step.

718. No two parts may overlap or cross (§ 432).

719. In two-part writing a third may not be followed by a fifth when both parts move a second.

FIG. 352.

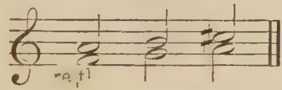
Bad.



720. In two-part writing one major third may not follow another at the step of a major second.

FIG. 353.

Bad.



721. The **leading-note** in counterpoint is not quite so restricted in its movement as in harmony. It may never be doubled except when it is a passing note, or in a sequence, or in an arpeggio while being held in another part (§ 757).

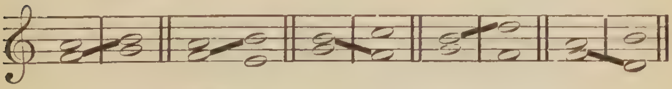
In a perfect cadence the leading-note must rise to the tonic. In other cases it is free to rise or fall.

722. The interval of the tritone (augmented fourth) may not occur between a note of the subject in one bar and a note of the counterpoint in another *when both parts proceed by step* (*a*) This is called **false relation of the tritone** [1] (*a*).

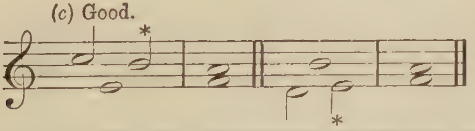
There is no false relation when one of the parts proceeds by leap (*b*), or when the movement by step is caused by a passing note (*c*).

FIG. 354.

(*a*) Bad. (*b*) Good.



(*c*) Good.



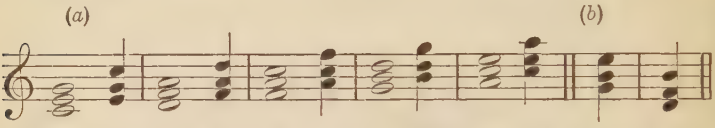
---

[1] Called also **mi contra fa**. According to the ancient rules, it was forbidden to have in successive chords the *mediant* (*i.e. mi*) of one key and the *subdominant* (*i.e. fa*) of the key a fourth above the first, *e.g.* the mediant of G, *i.e.* B, with the subdominant of C, *i.e.* F.

723. **Harmonic combinations** which may be used in strict counterpoint are (*a*) **common chords** and **first inversions.**[1] (*b*) The only discords allowed are **passing notes** and **prepared discords,** *i.e. suspensions.*

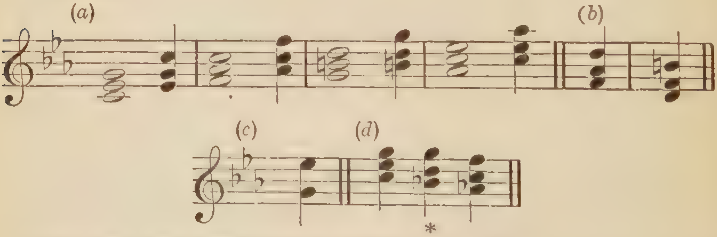
724. In **major keys** the only available chords are: (*a*) the *common chords* on the first, second, fourth, fifth, and sixth degrees, together with their first inversions; (*b*) the *first inversions* of the triads on the third and seventh.

Fig. 355.



725. In **minor keys** the only available chords are: (*a*) the *common chords* on the first, fourth, fifth, and sixth degrees with their first inversions; (*b*) the first inversion of the triads on the second and seventh; (*c*) when the fifth of the minor scale is in the bass it may be accompanied by the interval of a sixth, and either the bass or sixth may be doubled, but no third may be added; (*d*) when in the minor the bass *descends* stepwise from the tonic to the minor sixth then the minor seventh may be the bass of a first inversion.

Fig. 356.



726. The chords mentioned in §§ 724-5 may follow each other in any order, except that the common chord on the second of the scale should not be followed by that on the tonic, except when both chords are in their first inversion.

---

[1] The second inversion is disallowed because it contains the interval of a perfect fourth from the bass, which even in modern harmony is dissonant (§ 335).

727. **Rules for doubling.** The *root* is the best note to double, the next best is the *fifth*. The *major third* should not be doubled unless the doubled note is approached and left in contrary motion and by step of a second. There is no objection to the *minor third* being doubled.

For doubling the leading-note see § 721.

728. **Rule for omission of notes from a chord.** The *fifth* should, as a rule, be omitted in preference to the *third*.

729. There are five species of counterpoint.

The *first species* has note against note, *i.e.* when there is one note in the counterpoint to each note of the subject.

The *second species* has two notes in the counterpoint to each note of the subject.

The *third species* has more than two notes in the counterpoint to each note of the subject.

The *fourth species* has two notes in the counterpoint to each note of the subject, but written in syncopation.

The *fifth species* or *florid counterpoint* is a mixture of the other species; it consists in the main of the fourth species, ornamented by combination with the second and third.

CHAPTER LIII.

FIRST SPECIES OF COUNTERPOINT.

730. Each species will be separately taken in two, three, and four parts. As we have remarked before, very strict rules are to be observed, and these rules apply to such points as the manner of beginning and ending an exercise.

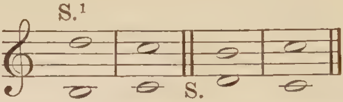
SECTION I.—**First Species in Two Parts.**

731. Every exercise **must begin** with a *perfect* interval, either the unison, fifth, or octave when the subject is in the lower part; with the unison or octave when the subject is in the upper part.

Every exercise **must end** with a *perfect cadence*, *i.e.* the leading-note proceeding to the tonic, while another part proceeds from the supertonic or dominant to the tonic.

A perfect cadence must not occur in the course of an exercise, but only at the end.

FIG. 357.



732. Two-part counterpoint must not have the *unison* in any bar except the first and last.

733. The imperfect concords, thirds, and sixths, are preferred to the perfect concords, fifths, and octaves. The perfect fourth is entirely forbidden because of its dissonant effect (§ 335).

734. Contrary motion is preferable to similar motion.

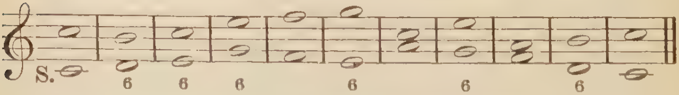
735. To avoid monotony, do not use more than three *consecutive* thirds or sixths.

The same note should not be repeated in two or more consecutive bars.

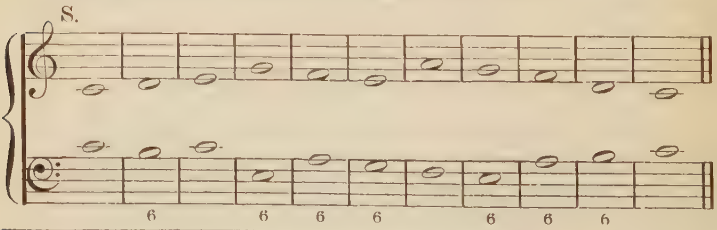
The object of all these rules, it will be readily seen, is to avoid monotony and to make each separate part contrast well with the others and stand out independently.

EXAMPLES IN THE **major.**

(*a*) *Subject* in the alto ; *counterpoint* above.



(*b*) *Subject* in the treble ; *counterpoint* below.

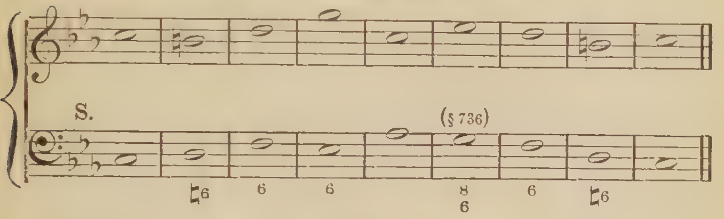


---

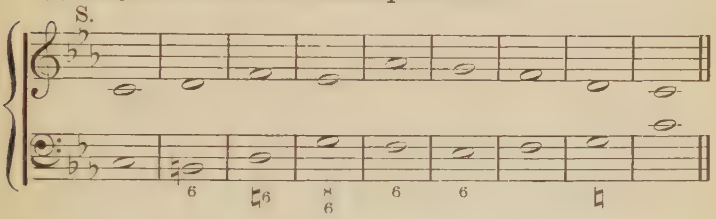
[1] The subject in counterpoint always ends with the progression supertonic to tonic. This is in order to allow a final cadence when the subject is placed in the bass.

EXAMPLES IN THE **minor.**

(*a*) *Subject* in the bass; *counterpoint* above.



(*b*) *Subject* in the alto; *counterpoint* below.



736. **Figuring.** The student is advised to figure even two-part exercises. From §§ 723–5 he will have little difficulty in doing this. The only point to be specially noted is the interval of the sixth above the dominant in minor keys (§ 725 (*c*)). In order to distinguish this from a $^6_3$ it is usually figured $^8_6$, implying that either note may be doubled, but that no third may be added.

The student should now work exercises, using the *canti fermi* given on p. 287.

SECTION II.—First Species in Three and Four Parts.

737. With the increase of the number of parts the difficulty increases, and therefore in three and four parts some of the rules for two-part writing are relaxed. For example:

(*a*) Two parts may occasionally have a unison in the course of the exercise.

(*b*) The rule forbidding more than three successive thirds or sixths between any two parts is less strictly enforced, because variety is afforded by the third part.

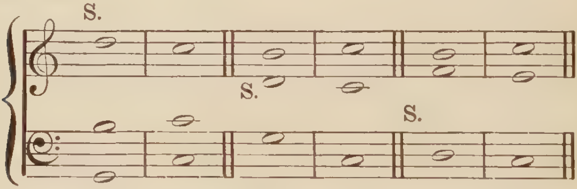
(*c*) The repetition of a note is less objectionable than in two-part writing.

738. In other respects the rules to be followed remain the same. The general rules for the distribution of the notes of a chord (§§ 284–5) are to be followed; an even distribution is best; if that is not possible the widest interval should as a rule be between the two lowest parts.

739. In the **first bar** one of the parts must begin with a perfect concord; one of the other parts may have the third. In four parts begin with a complete chord.

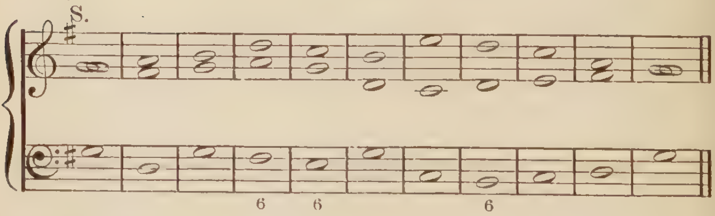
740. As before, the exercises must end with the perfect cadence, in this case the tonic chord preceded by the dominant common chord with its root in the bass, or the first inversion on the supertonic.

Fig. 358.

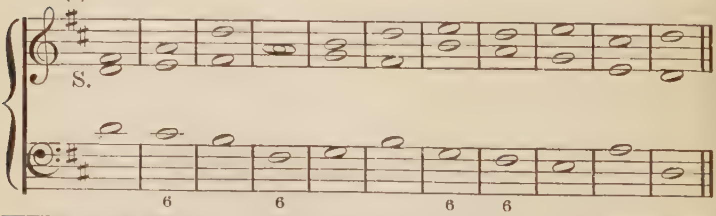


EXAMPLES[1] IN THREE PARTS.

(*a*)



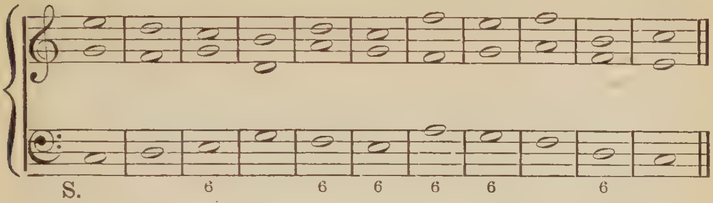
(*b*)



---

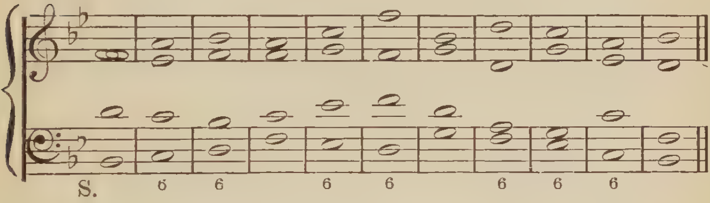
[1] These examples, to save space, are given in *short score*. The student, however, is advised to get accustomed to open score and the C clefs (§ 19) *v.* example § 302.

(c)

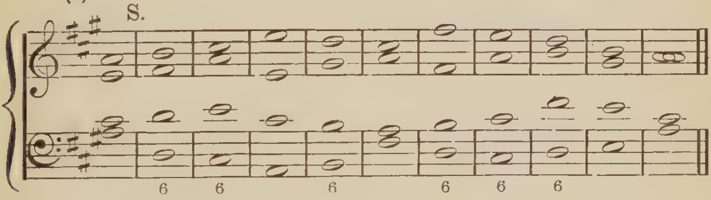


Examples in Four Parts.

(a)



(b)



CHAPTER LIV.

SECOND SPECIES OF COUNTERPOINT.

Section I.—Second species of counterpoint in two parts.

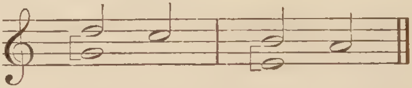
741. In the second species the counterpoint has two notes to each of the notes of the subject.

742. The **first** note of each bar (*i.e.* the accented note) must be a concord; the second (the unaccented) note may be either a concord (*i.e.* another note of the same chord) or a passing note (or auxiliary note) approached and left by step. When possible a passing note is preferred (§ 528).

743. No bar except the first and last may have the unison at the accented beat. There is no objection to the unison at the unaccented beat.

744. Perfect fifths or octaves may not occur on the accented beat of two successive bars. Such fifths and octaves are best avoided even at successive unaccented beats.

FIG. 359.

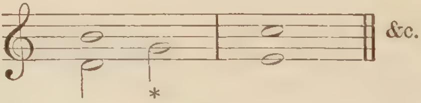


745. To avoid monotony the same counterpoint should not be used twice in the same exercise even when the subject is different.

746. In each bar there must be only **one chord.**

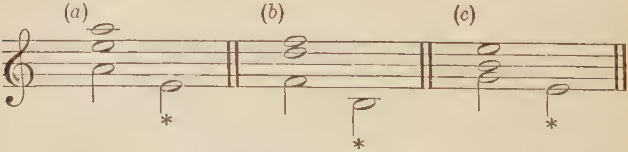
An exception to this is when the counterpoint in the bass begins with a first inversion and there is no room for a passing note between that note and the bass in the next bar. In that case the bass may leap a fourth upwards or a fifth downwards.

FIG. 360.



747. **Caution.** When the counterpoint *leaps* in the bass care must be taken that it does not leap to a note which, by being in the bass, would produce a $^6_4$ (§ 723-5), or a diminished fifth, or a fifth below the leading-note, such chords being disallowed.

FIG. 361.



748. **Passing notes in minor keys.** When the dominant and the leading-note are harmony notes the **major sixth** may be used between them, ascending or descending, fig. 263 (*a*).

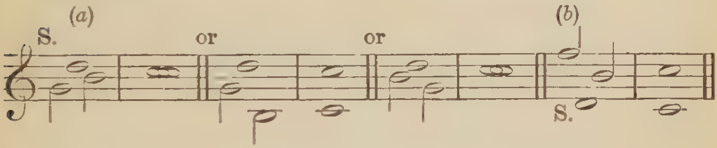
When the submediant and the key-note are harmony notes, the **minor seventh** may be used between them, ascending or descending, fig. 263 (*b*).

If the leading-note begins two consecutive bars, the **major sixth** may be used as an auxiliary note; so also the **minor seventh** when the minor sixth begins two consecutive bars.

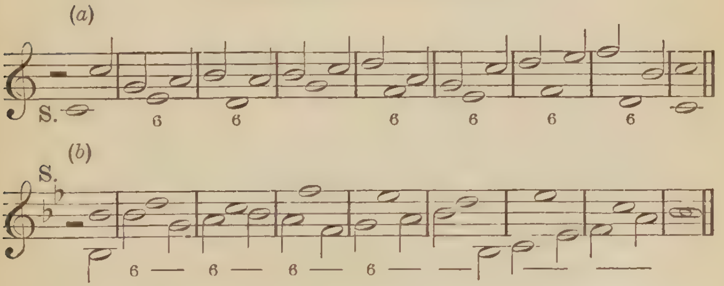
749. In the **first bar** the counterpoint must begin after a half-bar's rest. By entering after the subject, the counterpoint acquires greater point and individuality. The first note of the counterpoint must be a perfect interval.

750. **Cadences.** The principle underlying cadences in counterpoint is that there must be **only one chord in a bar.** This, in all species, must be the dominant common chord in its root position, or a first inversion on the supertonic (§ 740).

FIG. 362.



EXAMPLES IN TWO PARTS.



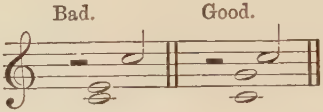
SECTION II.—Second Species in Three and Four Parts.

751. Only one of the parts will be in the second species, the others being in the first, following the rules of the first species.

752. As the part in the second species begins after a rest the

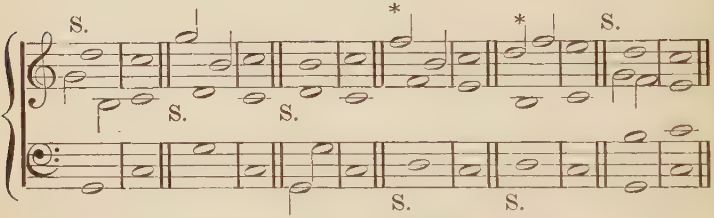
other parts must begin with a perfect interval. The moving part may begin with an imperfect interval.

FIG. 363.



753. Cadences.

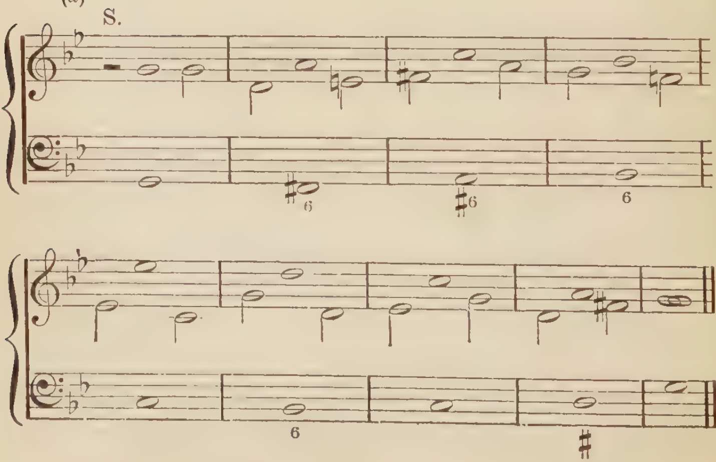
FIG. 364.



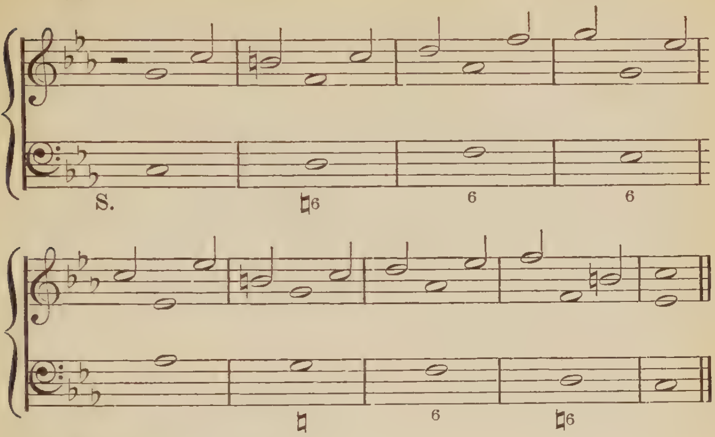
* These moving notes may be used in the alto.

EXAMPLES IN THREE AND FOUR PARTS.

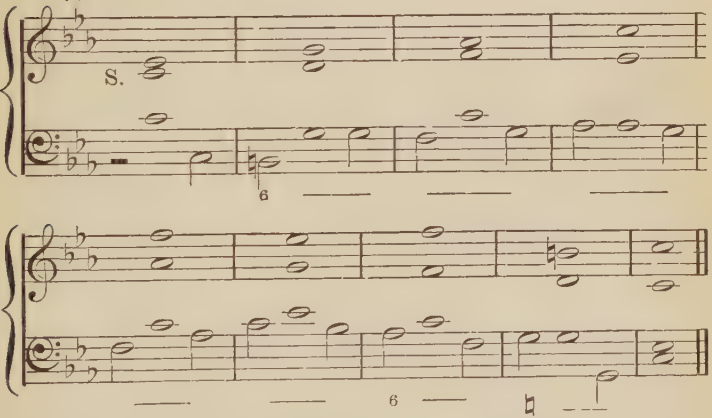
(*a*)



(b)



(c)



CHAPTER LV.

THIRD SPECIES OF COUNTERPOINT.

754. The third species may have three, four, or six notes to one of the subject, four being the most usual.

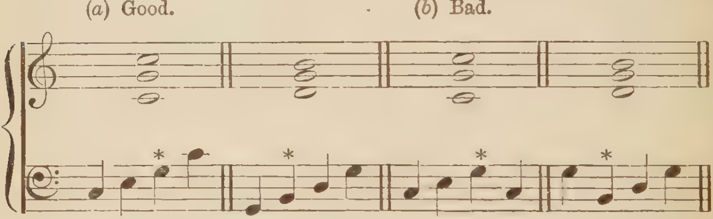
755. The first note of each bar must be a concord; the others may be concords or discords, but all discords must be approached and quitted by step.

If the note to which a passing-note proceeds is also a passing-note, the passage must continue in the same direction in passing-notes until a harmony note is reached (fig. 262).

756. A second may not resolve on a unison, fig. 268.

757. When the counterpoint is in the bass the *fifth* of a chord may be used in arpeggio, provided that it is neither the *highest*, *lowest*, nor *last* note of the arpeggio. This also applies to doubling the leading-note.

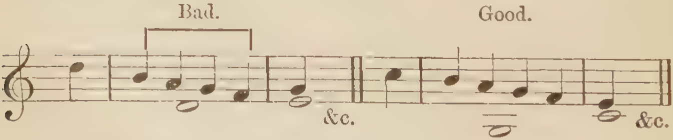
Fig. 365.



758. **Changing-notes** may be used in accordance with the rule stated in § 543.

759. Notes passing through the interval of a **tritone** are not allowed, except when they form part of a continuous passage beginning before and passing through this interval.

Fig. 366.

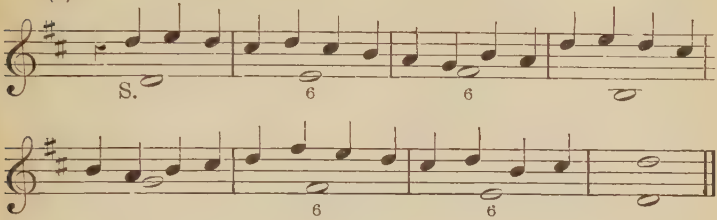


760. The counterpoint begins after a rest equal in value to one note of the counterpoint.

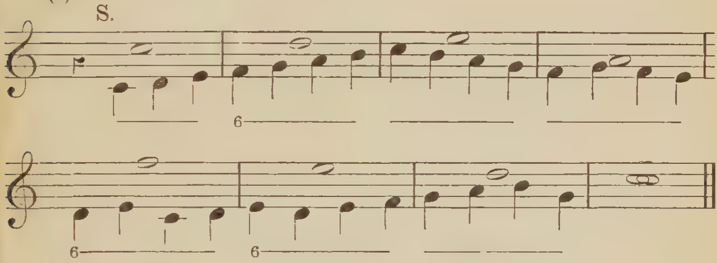
761. **Cadences**, *v.* § 750, and notice the forms employed in the following exercises.

EXAMPLES IN TWO PARTS.

(*a*)

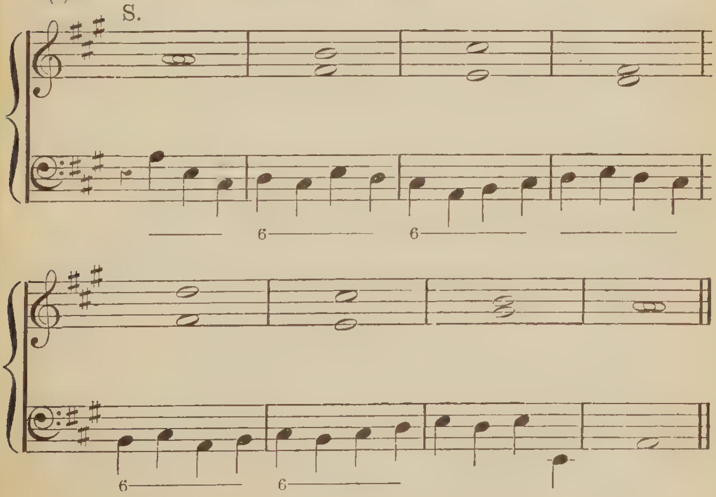


(*b*)

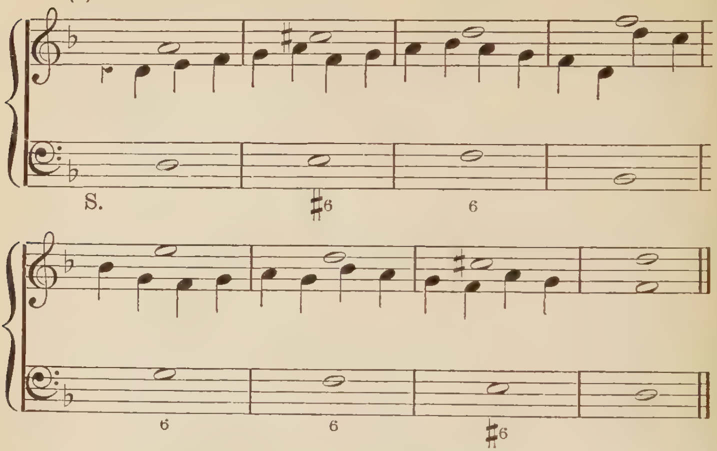


EXAMPLES IN THREE PARTS.

(*c*)

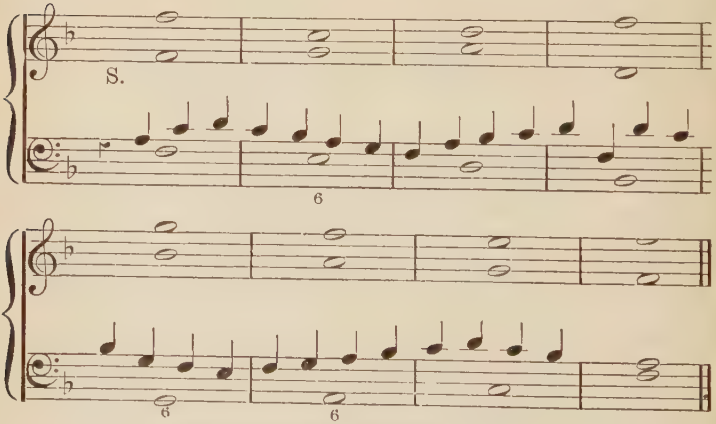


(*d*)



EXAMPLE IN FOUR PARTS.

(*e*)



CHAPTER LVI.

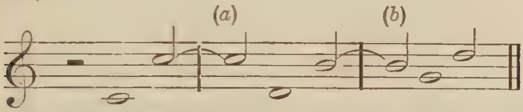
FOURTH SPECIES OF COUNTERPOINT.

762. In the fourth species the counterpoint has two notes to each note of the subject, but the second note of each bar is tied to the first of the following bar in syncopation (§ 79).

763. The first note of each bar (except the last) must be either (*a*) a **suspension** prepared in the previous half bar, in which case it resolves by falling or rising a second; or (*b*) a **concord**, in which case it is free to rise or fall provided it leaps to another note of the chord.

The note on the second half of each bar **must** be a concord.

FIG. 367.



764. The rules for suspensions here are identical with those described in § 500, only it must be remembered that, *in strict counterpoint, second inversions cannot be used* (§§ 723–5), consequently the second inversions of chords with suspensions which are available in harmony are here excluded.

765. The suspensions available are: the *suspended ninth* with first and third inversions, according to §§ 501–2; the *suspended fourth* with first and third inversions, according to §§ 507–15; the *fifth* on the third and seventh of major and minor keys resolving by rising as in § 516.

766. No suspension is allowed in any progression which, if the suspension were absent, would have forbidden consecutives § 500 (*e*).

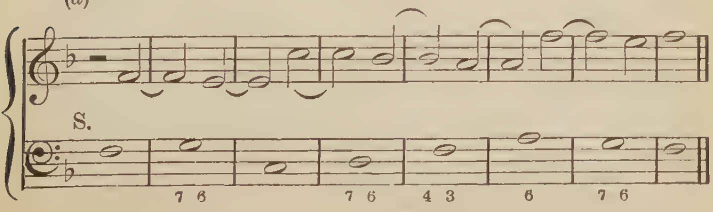
767. The note (or its octave) on which a suspension resolves must not be sounded at the same time as the suspended note, except the ninth and the fourth, according to the rules explained in § 500 (*f*). The note on which the suspended fifth resolves can *never* be sounded with that fifth.

768. The counterpoint must begin after a rest equal in value to one note of the counterpoint.

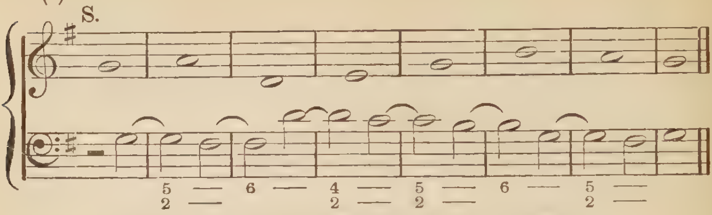
769. The chief **cadences** are shown in the following examples:

EXAMPLES IN TWO PARTS.

(*a*)

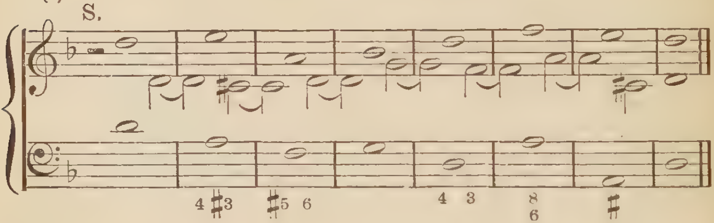


(b)

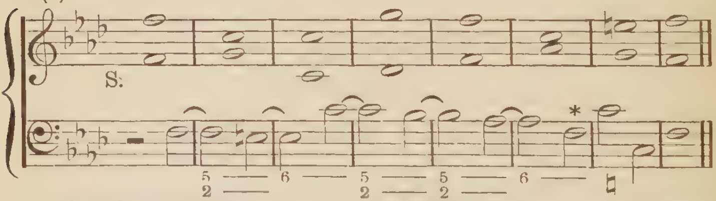


Examples in Three and Four Parts.

(c)

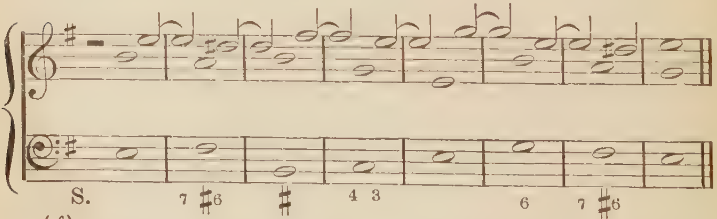


(d)

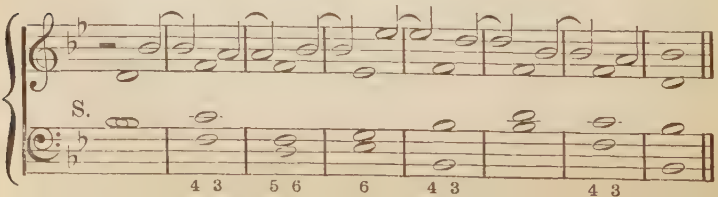


* When the fourth species is in the bass it is often necessary to break the syncopation to get a good cadence.

(e)



(f)

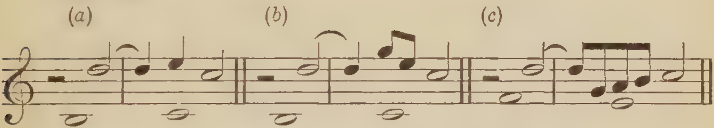


CHAPTER LVII.

FIFTH SPECIES OF COUNTERPOINT.

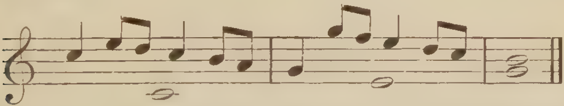
770. The fifth species has already been described as an ornamentation of the fourth species. This ornamentation is chiefly brought about by **ornamentally resolving** (§ 520) the suspensions, *i.e.* instead of proceeding immediately to its resolution, the suspended note may leap or go by step of a second to any other note of the chord provided that it then returns to the note of resolution, either (*a*) by leap, (*b*) by arpeggio, or (*c*) by passing-notes.

FIG. 368.



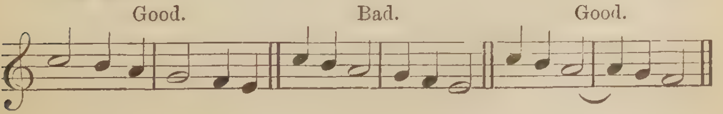
771. The even divisions of a bar of the third species may be subdivided into two quavers; four successive quavers should rarely be used except when the first is tied to a note held over from the preceding bar, as in fig. 368 (*c*).

FIG. 369.



772. A long note on the odd beat (*i.e.* first, third, &c.) of a bar may be followed by shorter notes on the next beat; but short notes on the odd beat may not be followed by longer notes on the even beats unless the long note is tied to a note in the following bar. There is an exception to this rule in cadences.

FIG. 370.



773. When a note is tied from one bar to the next, the part of the tied note before the bar-line must not be *shorter* than the part which follows.

774. A syncopation may be made either from a minim or a crotchet, but that from a minim is best.

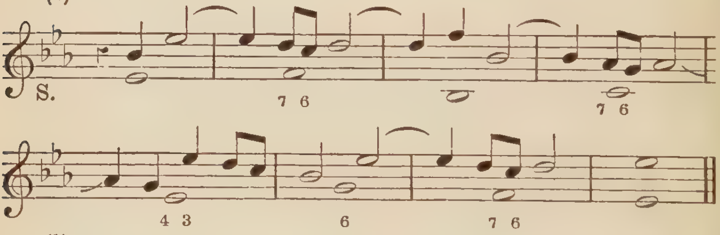
775. Although the second and third species may be used, this should not be done for more than two consecutive bars.

776. It is best to begin the counterpoint after a crotchet rest.

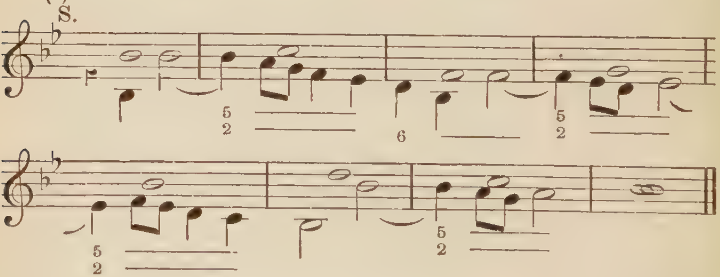
777. For **cadences** see the following examples, remembering § 750:

Examples in Two Parts.

(a)

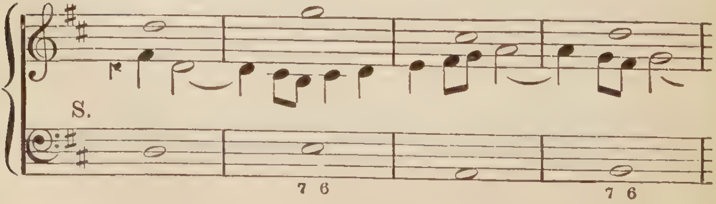


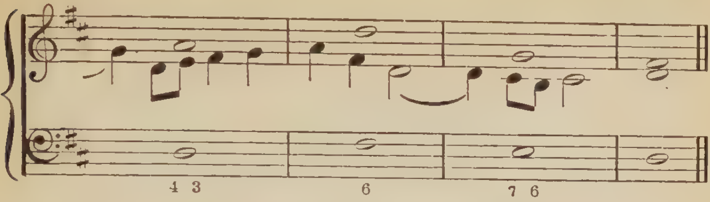
(b)



Example in Three Parts.

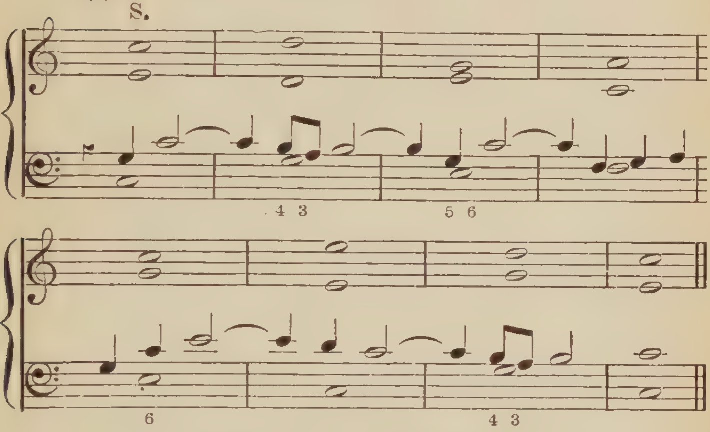
(c)





EXAMPLE IN FOUR PARTS.

(d)



CHAPTER LVIII.

COMBINED COUNTERPOINT.

778. The five species of counterpoint may be combined with each other, or two or more parts may at the same time have the same species of counterpoint.

In working these exercises the following additional rules are necessary.

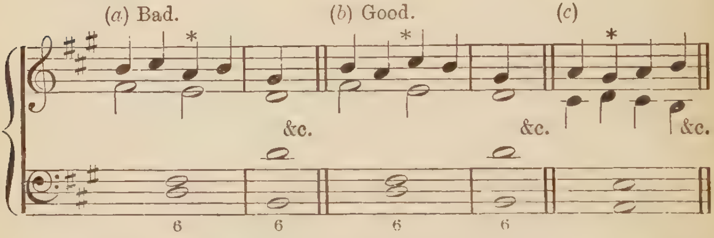
779. No parts may move in seconds, sevenths, or ninths with each other.

780. The *lowest moving part*, even when not in the bass, must be considered as the bass, and must not move except in accordance with the rules for the bass (§§ 715, 723).

From this it follows that two upper parts may not move in fourths unless a lower part moves at the same time as the second fourth.

781. Each part must follow the rules of the species to which it belongs, with the additional rule that moving parts, although following the rules of their species, are not correct unless they move by consonant intervals with each other. An exception is allowed when a dissonant interval is approached and left by step of a second in contrary motion (*c*).

FIG. 371.



At (*a*) treble and alto are both correct according to their species, but the combination is incorrect because at * they make a fourth, which is not allowed because the alto is now the lowest moving part (§ 733).

At (*b*) this is corrected. The fourth between the treble and alto of bar two is allowed because the lower parts have moved, and therefore this fourth is between upper parts.

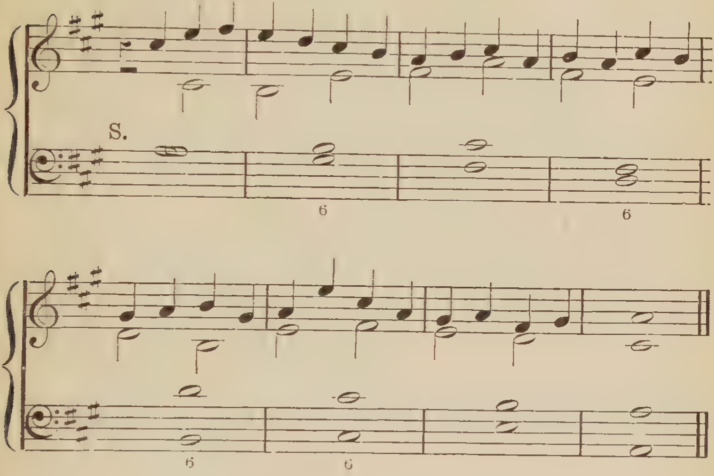
782. When the *fourth* species is used in two or more parts at the same time, or the *fourth* and *fifth* are combined, the rules for double and triple suspensions (§§ 521–3) must be followed.

783. No part may move by *similar* motion to the note (or its octave) on which a suspended note resolves, but any part may move in *contrary* motion to such note, §§ 379, 506.

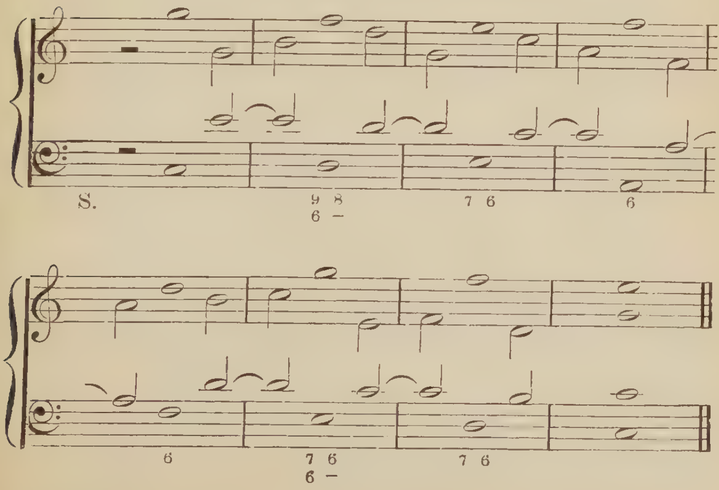
784. When several parts are in the fifth species it is good to let the parts enter after each other. The parts should be contrasted as much as possible, one part moving while another has holding notes, &c. When possible, points of imitation should be introduced, as in Ex. (*e*) p. 287.

Examples of Combined Counterpoint.

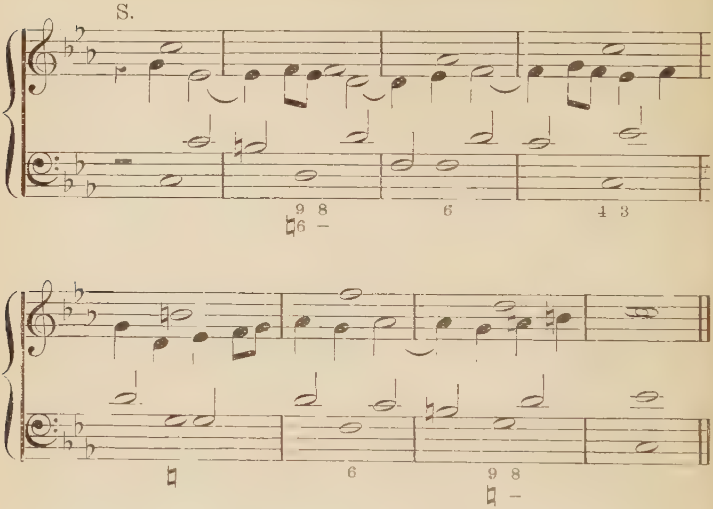
(*a*) Second and third species combined.



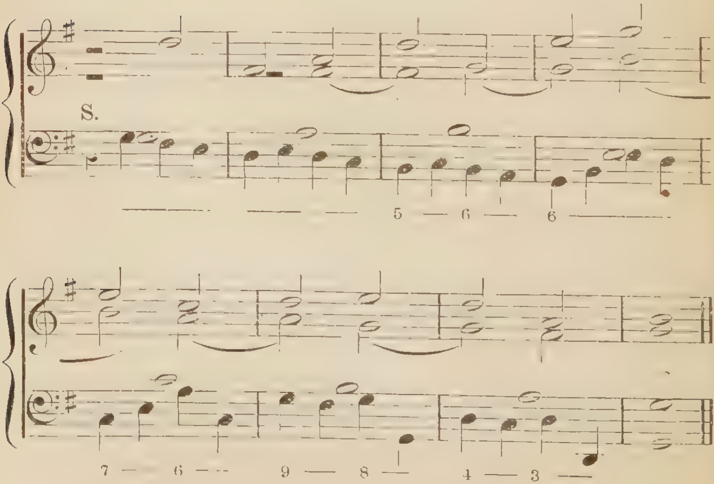
(*b*) Second and fourth species combined.



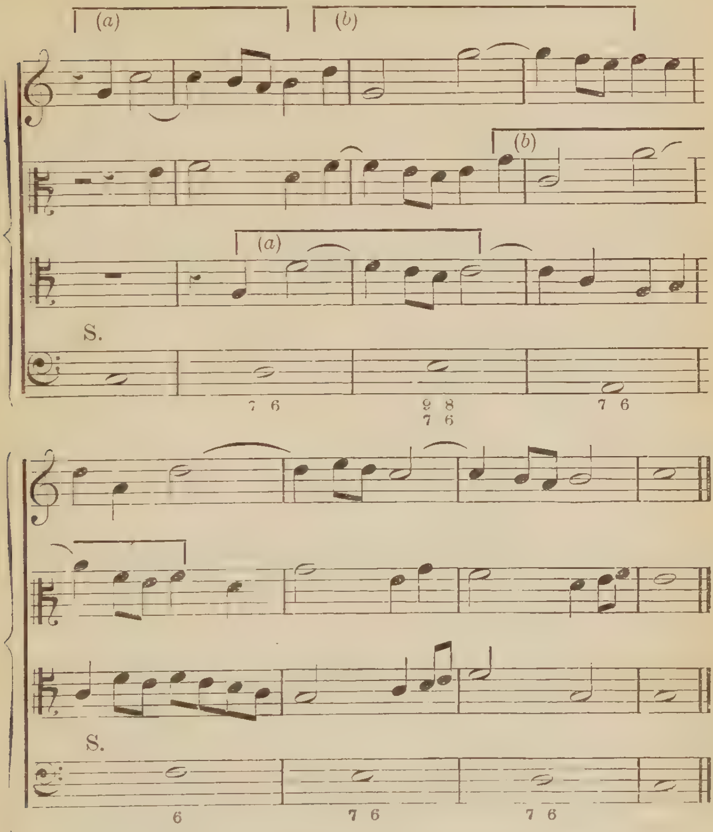
(*c*) Second and fifth species combined.



(*d*) Second, third, and fourth species combined.



(*e*) **Fifth species in three parts.**

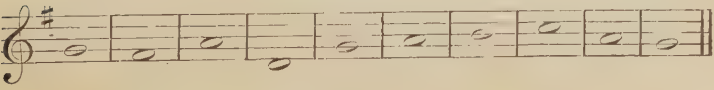


Canti Fermi FOR EXERCISES IN COUNTERPOINT.

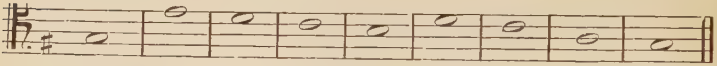
These subjects should be used in every part, counterpoint being added above and below. They must be transposed when necessary to suit the compass of the part in which they are used. The same subject should be worked in all species.

Major.

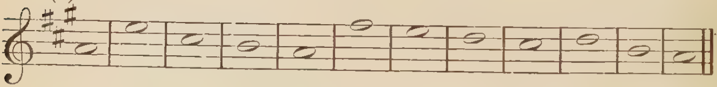
(1)



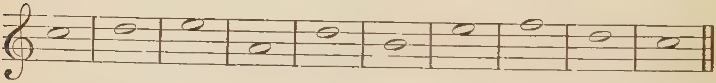
(2)



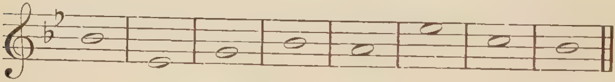
(3)



(4)

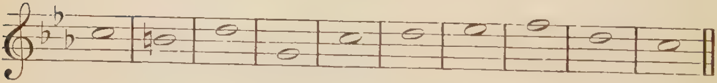


(5)

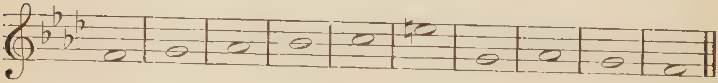


Minor.

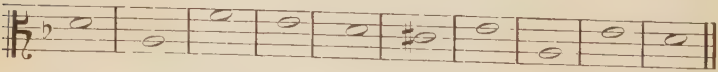
(6)



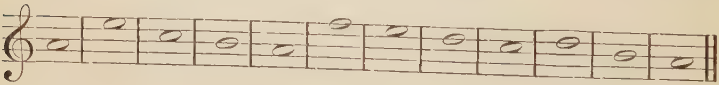
(7)



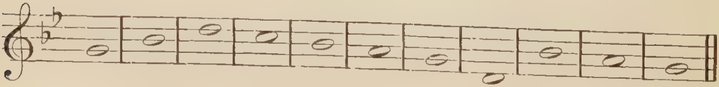
(8)



(9)



(10)



INDEX

The **references** *are to* **paragraphs.**

Acciaccatura, 542
Added sixth, 585
Anticipation, 544
Appoggiatura, 542
Arpeggio, 347, 658, 659
Augmented interval, progression by, 429, 430
Augmented sixth, 629–39
— — derivation of, 631
— — inaccurately written, 639
— — on the minor second, 633–7
— — used in modulation, 661
Augmented triad, 642–7
Auxiliary notes, 539–41
Bass, 320
— figured, 321–5
— voice, compass of, 300
Cadences, 450, 461, 462
— imperfect, 459
— in counterpoint, 750
— interrupted, 460
— inverted, 463
— middle, 694
— perfect, 453
— plagal, 456
Canti fermi, for exercises, p. 287
Canto fermo, p. 262, n. 1
Changing notes, 543
Chord, common, 278
— close, extended, 284
— common, in major keys, 312
— — in minor keys, 357
— definition of, 275
— method of building, 276
— root of, 276
Chromatic chords, 594
— common chords, 595
— fundamental discords, 600–18
— scale, origin of, 623–8
Consecutive fifths, 434–6
— fourths, 442
— hidden, 440
— octaves and unisons, 437–9
— seconds and sevenths, 443
Consonance, 271
Convenient notation, 589
Counterpoint, 691
— combined, 778–84
— compared with harmony, 698
— double, 701
— fifth species, 770–77
— figuring, 736
— first species, 731–40
— fourth species, 762–9
— free and strict, 704
— laws of progression in, 706–22
— quadruple, quintuple, triple, 752
— second species, 741–9
— third species, 754–61
Contrapuntal, p. 263, n. 1
Crossing of parts, 432
Diatonic discords, 547
Diminished interval, progression by, 431
— octave, 449
— seventh, 566–73
Direct w', 622
Discord, fundamental, 390, 619
— secondary, 414, 574
Dissonance, 271
Dissonant, 271
— triads, 640–6
Distribution of a chord, 284, 285, 687
Dominant seventh, 372, 407
— — allowed to rise, 400
— — decides the key, 388
— — exceptional resolution of, 485–7
Doubling, 280, 327, 362, 377, 727
— in a second inversion, 336
Eleventh, the dominant, 581–6
— figuring of, 582
Enharmonic, p. 204, n. 1
— changes in diminished seventh, 567
— modulation, 570–3, 661
Essential discords, 547
Exercises, method of writing, 300
False relation, 445–9
— — of the tritone, 722
Figuring, 321–5, 345, 376, 527
— in counterpoint, 736
— use of accidentals, 363, 371
— — — horizontal line, 406
First inversions, 319, 326
— in succession, 329–32
Fourths with the bass, 335
French sixth, 630
Fundamental discords, 390
— — and the chromatic scale, 619
— — to find root of, 565, 620
German sixth, 630
Grace notes, 542
Gregorian tones, 371*a*
Ground bass, 660
Harmonic series, 389
— combinations in strict counterpoint, 723–6
Harmonising a melody, 669–96
Harmony, 273
Hidden consecutives, exceptions to, 316, 440
Intervals, diatonic and chromatic, 253
— consonant and dissonant, 272
— inversion of, 268
— simple and compound, 252
— table of, 256, 267
Inversions, 318
— first, 326, 367
— second, 334, 370
— of augmented sixths, 636
— of dominant sevenths, 391

Italian sixth, 630
Key, 628
Laws of part-writing, 428–49
Leading note, 298, 433
— in counterpoint, 721
Leading seventh, 562
Major sixth of minor mode, 353
— third, doubling of, 328
Melody, 273
— how to harmonise, 669–96
Mi contra fa, p. 265, n. 1
Minor scale, 348–52
— — origin of, 371*a*
Modes, Gregorian, 371*a*
Modulation, 471–88, 661–8
— compound, 667
— enharmonic, 566, 661
— extraneous, 666
— natural, 476
— on a pedal, 652
Motion, contrary, oblique, similar, 286
Names of notes of scale, 250
Neapolitan sixth, 598
Ninth dominant, 548–56
— — inversions of, 557–61
— — method of writing, 613
Ninth, supertonic, 611
— tonic, 615
Omission of notes from a chord, 282, 378, 728
Organ point, 648
Overlapping of parts, 432
Part, 274
Parts, compass of, 300
— extreme, inner, 313
Passing notes, 528–38
— — figuring of, 546
Pedal note, 648–57
— — double, 655
— — inverted, 654
Plain song, p. 262, n. 1
Preparation of dissonant notes, 415, 427
— of suspension, 492
Related keys, 472–4
Resolution, 374, 380
— of suspensions, 492–3
— ornamental, 387, 405, 425, 519–20
Retardations, 545
Root of chord, 276
— double, 631
— to find, 565
Scale, chromatic, 623–8
Score, open and short, 302
Second inversions, 337–47
— — in arpeggio, 347
Secondary sevenths, 414
— — and dominant compared, 426
— — in sequence, 424
Secondary ninths, 574–80
— sevenths and ninths compared, 578
Sequences, 464–70
Sevenths, chromatic, 600–7
— dominant, 373–7, 485–8
— secondary, 414
Shake, 542
Supertonic chromatic common chords, 596
— — ninths, 601
— — sevenths, 611
Suspensions, 489–92
— double and triple, 521
— figuring of, 498, 503, 509–13, 516–7
— of chords, 524
— resolution of, 506
— rules for, 500
Suspended fourth, 507–15
— ninth, 495
Thirteenth, the dominant, 587–91
— supertonic and tonic, 617
Tierce de Picardie, 365–6
Tonic sevenths, 605
— ninths, 615
Triad, 277
— augmented and diminished, 640–7, p. 102, n. 2
Tritone, false relation of, 722
Turn, 542
Unessential discords, 547

Spottiswoode & Co. Printers, New-street Square, London.

This book is to be returned on or before
the last date stamped below.

23 OCT 1985

~~5 DEC 1985~~

~~5 DEC 1990~~

[illegible] APR 1995

28 APR 1995

BERTENSHAW.

SM 17436.

L. I. H. E.
THE BECK LIBRARY
WOOLTON ROAD, LIVERPOOL L16 8ND

218850

LINKED